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AGRI-NEWS

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Toast in the

New Year!

Happy New Year

1976

It's a spanking new year, filled with new opportunities for all! Here's hoping it brings prosperity, health and happiness to you, our good friends

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Alberta
AGRICULTURE
COMMUNICATIONS

January 5, 1976

FOR IMMEDIATE RELEASE

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NEW YEAR'S MESSAGE FROM THE AGRICULTURAL MINISTER

In a New Year's message Alberta's agricultural minister, Marvin Moore, commended the province's farming population for achieving better than average crop yields and grades in the past year.

"Despite the hardships caused by high 'input' costs," he said,"farmers managed to increase their net farm income in 1975 to an estimated $831 million compared with $230 million only five years ago, an achievement for which they can be justly proud."

Although cattle prices were far from encouraging in 1975, Mr. Moore expects conditions to improve in 1976. He based his optimism on a reduced North American cattle population and a generally improving North American economic situation.

Mr. Moore concluded his New Year's message with hopes for good crops, stable prices and stable markets in 1976 and extended his sincere wishes for a prosperous New Year to the farming community of Alberta.

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January 5, 1976

FOR IMMEDIATE RELEASE

ECONOMIC CONDITIONS AND GENERAL DEMAND FACTORS

by Peter Perkins
Market Analyst
Alberta Agriculture

The general economic environment offers cause for optimism in respect to grain price prospects in 1976. Whereas general demand factors were negative in early 1975, they are now positive.

It is even possible that market participants are underrating the potential positive effect of improving economic conditions around the world which should aid markets through expanding demand. Reluctance to place much importance on improving economic conditions is probably due to the uncertainty with which recovery from the recession is viewed. In fact, a general expansion in economic activity in 1976 is by no means a widely accepted projection.

However, there are at least some indications that lend support to expectations that a sustained economic growth will dominate the economic scene by the middle of 1976 and thereafter. It is the U. S. economy that holds the key to this possible expansion phase, and U. S. economists are generally unanimous in their contention that the American economy will show a real growth of 5 per cent in 1976 compared with the recessionary decline of 4 per cent in the 1975 fiscal year.

In addition, a general decline in inflation to 6 per cent from 9.5 per cent is optimistically suggested for 1976. However, despite these encouraging forecasts, some analysts fear that they will disappear, or at least slacken, as present expansionary programs are wound down. Although there is probably some truth in this assessment, it will likely mean only that recovery will be slower than has been the case in past economic cycles rather than that there will be no recovery at all.

On a global scale, as in the U. S. A., a gradual increase in economic activity during 1976 seems reasonable to expect. This recovery from the worst depression in post war times will probably be unevenly distributed as well as slow, but by the end of this year most of the forecasters expect the beginning of the next economic boom cycle to be general and solidly established.

- (cont'd) -

Economic Conditions and General Demand Factors (cont'd)

A projection of increasing demand through economic growth, no matter how minor the effect, is a positive factor for agricultural commodity markets. Rather than hindering returns to farm enterprises, as was the case in the first half of 1975, it is bound to assist them.

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FOR IMMEDIATE RELEASE

LIQUID PROTEIN SUPPLEMENTS FOR CATTLE MAINTENANCE RATIONS

Although liquid protein supplements are suitable for range cattle feeding, they should not be expected to produce 'magical' results.

Alberta Agriculture's regional livestock specialist at Vermilion, Walter Dietz, says that these products offer convenience in feeding and an easy way of providing small amounts of trace nutrients, but that they should be carefully assessed from an individual point of view.

When fed to range animals, liquid protein supplements will provide some protein, but the most efficient results are only obtained when grain is included in the ration. Also, care must be taken to be sure that the animals do not get too much of this protein except in the very cold weather when they are likely to not get enough. The liquid can become so cold to the touch that the animals will not eat it.

Mr. Dietz also points out that although liquid protein supplements contain molasses, they are not a significant source of energy relative to the total amount required by an animal. They are basically designed to supply additional protein, minerals and vitamins. For example, a pound of liquid protein supplement contains the equivalent in energy of one pound of very good hay. The only difference between the two is that the energy is more rapidly available from the supplement than it is from the hay.

The following table shows liquid protein supplements are a cheaper source of protein than home grown feeds, but that home grown feeds are a cheaper source of energy.

Feed	Protein Equivalent in one pound	Cost/lb protein	Digestible Energy * Mcal/lb	Cents per Mcal digestible energy
Liquid Supplement @ 8¢ /lb	0.32	25¢	0.945	8.5¢
Barley @ 5.5¢ /lb	0.10	55¢	1.4	3.9¢
Good Hay @ 3¢/lb	0.10	30¢	0.9	3.3¢

* million calories per pound.

- (cont'd) -

Liquid Protein Supplements for Cattle Maintenance Rations (cont'd)

Mr. Dietz says that the proportion of protein in liquid supplements that is derived from a non-protein source like urea varies and that it may be as high as 100 per cent.

The difference between conventional protein and that derived from a non-protein source is that the former can be used directly by the animal, while the latter must first be converted by the micro-organisms in the animal's rumen.

The micro-organisms manufacture the non-protein into amino acids for their own growth. The animal uses these micro-organisms as a source of protein. However, there must be a readily available supply of carbohydrates (starch) before this conversion takes place efficiently. Also, if a sufficient quantity of carbohydrates is not available, the excess ammonia produced from the urea can be toxic to the animal.

Roughages like straw, greenfeed and hay all contain some carbohydrates, but the starch and cellulose in these roughages are degrated too slowly and the sugars in the molasses ferment too rapidly for maximum protein synthesis to take place. This is the reason that the inclusion of grain in the rations results in the more efficient use of liquid protein supplements.

According to Mr. Dietz, it may be necessary to feed extra calcium and/or salt with liquid protein supplements because some of the products do not contain enough of these elements. When an animal's calcium intake is lower than its phosphorus intake, the nutritional imbalance can result in symptoms similar to those of milk fever in a lactating animal. This situation may occur when high grain, low roughage rations or roughages such as greenfeed and silage are being fed. Because the calcium-phosphorus ratio in these rations is usually very close, a low calcium relative to phosphorus ratio in the liquid protein supplements will cause a nutritional imbalance.

Mr. Dietz advises cattlemen who are not sure how to supplement their cattle rations to contact their district agriculturist or an animal nutritionist.

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January 5, 1976

FOR IMMEDIATE RELEASE

GLOBAL GRAIN SUPPLIES

Although international grain prices have slumped somewhat from their speculative highs of August and September, there is little reason to fear a continuing decline as was the case during the first half of 1975.

This is the opinion of Peter Perkins, marketing analyst with Alberta Agriculture, who points out that the world grain supply is little different now from what it was a year ago. "Total production is currently expected to be about the same as the revised estimate of 921 million tonnes for the 1974-75 crop year," he says. However, distribution of the 1975-76 production is significantly different to that of 1974-75, and it is this fact that partially explains why current prices are some 30 to 40 per cent lower than they were this time last year.

Another factor is that there is more certainty now with respect to available world grain supplies than there was this time last year. All that was known at the end of 1974 was that world supplies would be tight at least until the 1975 Northern Hemisphere crop was harvested. How tight they would be was anybody's guess!

"It was this fear of critical shortages," says Mr. Perkins, "that created the atmosphere for the high prices that prevailed through the fall of 1974." In contrast to that situation, current information for most areas of the world concerning the 1975 harvest is known with considerable accuracy and certainty.

The most serious crop failures in 1975 which prevented the much needed growth in world food supplies, occured in the Soviet Union and Europe. The Soviet crop, now confirmed a disaster, yielded only 137 million tonnes, some 60 million tonnes less than last year's rather mediocre harvest.

Although Western European production was fair by historical standards, it was down 7 per cent from the record 1974 crop. East European crops also suffered from less than favorable weather and now appear to be about 5 per cent less than the last crop year.

(cont'd)

Global Grain Supplies (cont'd)

However, these crop failures were for the most part offset by excellent crops in Asia, North America and parts of the Southern Hemisphere. India and China, for example, both claimed to have achieved record food production. The United States also harvested record wheat and corn crops and boosted their total grain output by 43 million tonnes to achieve a massive production of 242 million tonnes. Canada's total grain harvest should approach 34 million tonnes, which represents a 16 per cent increase over 1974's poor production level.

Australia's grain harvest is now in full swing. It is expected to reach 16 million tonnes, some 4 per cent less than 1974's excellent crop, but much better than had been expected following that country's very dry seeding period.

In contrast to their poor 1974 harvest of less than 6 million tonnes, Argentina appears set to reap a bumper wheat crop of more than 8 million tonnes. Other Latin American countries are expecting reasonable grain harvests except for Brazil where the severe frosts of last July ruined the wheat crop. However, Brazil's base for soybean production was unaffected and a further gain of 20 per cent over the last crop year is expected.

"In essence," explains Mr. Perkins, "the global 1975 harvest turned out much the same as that of 1974 with one critical difference. That difference is that all the major grain exporters, except France, have substantially more grain available for sale to traditional importers than they had in 1974-75. In fact, additional exports to the amount of 30 million tonnes could be made by the major grain exporters without seriously affecting either their domestic supplies or their carryover stock position."

In 1974, because of crop failures in most leading surplus producing countries, the importing nations were afraid that their needs would not be met and, consequently, contracted their supplies where-ever possible very early in the crop year. This buying boom caused prices to skyrocket in the fall of 1974. Since this has not been the case in 1975, prices are correspondingly lower than they were a year ago.

- (cont') -

Global Grain Supplies (cont'd)

According to Mr. Perkins, United States Department of Agriculture analysts are predicting a record high year in world grain trade despite the current lag in export business. Much of this expected increased business is based on the Soviet Union's crop failure and their need to import a massive volume of foreign grains. Even though the demand for imported grain in the rest of the world will be less than it was in 1974, it will still be sufficient to absorb most of the exportable surplus.

Mr. Perkins believes that as the additional demand, other than that of Soviet origin, begins to show itself, prices will start to show some strength. Other factors which could aid this strengthening include a general improvement in world economic conditions, a continuing tight holding policy by farmers and concern for winter crops in the Nortern Hemisphere. On the other hand, these positive factors could be offset by expectations of improved prospects for 1976 crops and a sustained lack of interest in exports by traditional buyers.

"However, on balance," says Mr. Perkins, "current conditions suggest that grain prices may have reached their seasonal lows. Rather than a continuing slump like that of last year, it seems more reasonable to expect at least some minor improvement in price levels in the early months of 1976."

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January 5, 1976

FOR IMMEDIATE RELEASE

DARK-WINGED FUNGUS GNATS

If you have noticed small, sooty-grey flies hovering around your house plants, the chances are you have an infestation of dark-winged fungus gnats.

The adult fly is 1.5 to 3mm (about 1/8") long with dusky wings and a pointed abdomen. The female lays its cluster of eggs in the soil, preferably wet soil rich in humus, and the eggs hatch in four to six days. The small legless, semi-transparent larvae or maggots move around in the soil in search of food. When full-grown in five to 14 days, they are 3 to 5mm (about 1/4") long and have distinct black heads. At this stage they can be found feeding on or just below the soil surface or around the roots of the plant.

Although they normally live on fungi and decaying plant material, they will feed on plant roots. When present in large numbers they weaken young plants and promote basal rot in cuttings. Older plants that have been attacked appear to lack vigor and their leaves will often turn yellow.

Marilyn Steiner, technician with Alberta Agriculture's plant industry laboratory, says that aerosol insecticides containing pyrethrins readily kill adult fungus gnats.

She also says that there is no chemical registered for controlling fungus gnat larvae, but that the following insecticides, available for household use, will control them.

- Diazinon 5 per cent granular -- sprinkle lightly on the soil surface.
- Diazinon 12.5 per cent emulsifiable concentrate -- add one tablespoon to a gallon of water and apply as a soil drench.
- Malathion 50 per cent emulsifiable concentrate -- add one teaspoonful to a gallon of water and apply as a soil drench.

According to Mrs. Steiner, treatments should be repeated every 14 days until there are no more adult flies left. She stresses that the label should always be checked before any of these chemicals are used because they are toxic to some house plants.

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Dark-Winged Fungus Gnats (cont'd)

An alternative to the use of chemicals is to remove the plant from its pot and wash all the soil off its roots. Then clean out the infested areas of the roots and crown and repot the plant in soil which has been sterilized in a 65 °C (150° F) oven for 30 minutes.

There are several precautionary measures that can be taken to avoid infestations of dark-winged fungus gnats. They include the following:

- Remove any decaying organic material in the basement and dry out damp areas.
- Allow the soil around the plants to approach the dry side between waterings.
- Isolate any new house plants from the others for about a week. When possible enclose the new plant in a plastic bag to entrap the flies. The maggots will reveal their presence by coming up to the soil surface.

January 5, 1976

FOR IMMEDIATE RELEASE

CARRION DISPOSAL RECOMMENDED

Alberta Agriculture's supervisor of animal pest control, Cliff Barrett, suggests that livestock producers make a special effort this winter to dispose of dead animals.

He explains that coyote numbers are very high across the province and that mice and rabbit populations are very low. This means that dead animals left lying around will attract hungry coyotes to the district and provide them with a source of food. "As long as there is any type of food, around the coyotes will remain in the district ready to prey on new borne calves and lambs next spring," Mr. Barrett says.

Several of Alberta Agriculture's predator control specialists have noted coyotes cashing away meat from the carcasses of dead animals for future use. "By disposing of this source of meat it should be possible," Mr. Barrett says, "to keep local coyote numbers down."

The recommended ways of disposing of dead animals are to burn them, bury them deeply in the manure pile or have them taken away by a nearby animal rendering plant.

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January 5, 1976

FOR IMMEDIATE RELEASE

USDA DESIGNED SOLAR ENERGY HEATED HOUSE NEARS COMPLETION

Solar energy heated house.

Construction of a medium-priced, three-bedroom family dwelling heated with solar energy, designed by the United States Department of Agriculture's Research Service (ARS) is nearing completion.

The report received by Alberta Agriculture says the completely insulated attic of the house serves as the solar collector and a 12-inch thick layer of crushed rock beneath the floor of the house serves as a heat storage tank. The house is conventional in other respects.

According to the U. S. report, the heating system is simple in design. Two layers of translucent fiberglass replace conventional roofing on the south roof slope and transmit sunshine or solar energy into the attic where it is absorbed by a black plywood floor. This heats the air in the attic and the heated air is circulated to heat the house and the rocks beneath the house. The heated rocks can store a four-day supply of heat to warm the house at night and during cloudy or rainy weather.

The solar heated house was designed at the ARS Rural Housing Research Unit, and is part of the ARS effort to lower the operating costs of rural housing with a low-cost, low-maintenance heating system using solar radiation as the energy source. The report says such a heating system could be modified to match the demands of geographic and climatic areas.

January 5, 1976

FOR IMMEDIATE RELEASE

SECOND ALBERTA PORK CONGRESS

Let's go whole hog . . . .

That was the concensus of committee members planning the second Alberta Pork Congress to be held at the exhibition grounds in Red Deer on June 22, 23 and 24, 1976.

The congress is designed to aquaint consumers with the function of pork producers, industry related firms, and meat processors and with the vital role they play in Canada's pork production industry.

Following the success of the initial congress which was held at the same place in June 1975, organizers visualize an even bigger and better event this year. Although the basic format of the congress will be unchanged from last year, many innovative ideas and promotional programs are being formulated to stimulate even greater interest and participation by producers and consumers.

Some of the highlights of the three-day event will be educational lectures and seminars for producers; consumer-oriented displays featuring delicious pork dishes and recipes; meat cutting demonstrations; manufacturers' displays and industrial installations.

Performance tested high-quality swine from the four Western provinces will be entered in judging competitions and will be offered for sale. There will also be a barrow show which will culminate with a carcass sale.

The congress will conclude with a massive public pork barbeque and show participants, industry officials and government personnel will be treated to a wind-up banquet featuring a yet to be named keynote speaker.

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Alberta
AGRICULTURE

January 5, 1976

FOR IMMEDIATE RELEASE

FAMILY FINANCE RECORD BOOK

Do you keep family records? Have you got a good record keeping book?

If you live on a farm you will find Alberta Agriculture's "Family Finance Record Book", prepared by home management specialist Patricia Mascaluk, ideal for keeping your family records. It can also be used by urban families and even by single people.

It contains five sections. The first covers goals. Here you list both your short and long-term goals and their estimated costs. The next section, called an estate check list, provides space for you to list such things as your bank accounts; outstanding land payments; the vehicles on the farm, their license numbers and details regarding payments; insurance policies; stocks and bonds; a description of your land and any payments that are owing and so on.

The third section deals with your net worth statement. Here you list all your assets and liabilities and find out your total net worth. The fourth section is your financial plan. In this section you develop your financial plan for the coming year based on past experience, and record monthly expenses in each category of family spending.

The final section is set up so that you can take a complete inventory of all your household equipment and furnishings with a minimum of effort.

Copies of the "Family Finance Record Book" can be obtained, free of charge, from district home economists and the publications office, Alberta Agriculture, Agriculture Building, 9718 - 107 Street, Edmonton, Alberta, T5K 2C8.

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January 5, 1976

FOR IMMEDIATE RELEASE

PINCHER CREEK NEWSLETTER

Here is a light hearted article to celebrate the New Year. It is from the Pincher Creek Newsletter, one of the many newsletters that are published by Alberta Agriculture's 62 rural extension offices.

Minimum Requirements for Ranching

1. A big hat, pair of tight pants, matching gum boots.
2. At least two head of livestock, one male, one female.
3. A $12,000 or more off-farm job.
4. A new pick-up with air conditioning, auto transmission, power steering, with a fifth wheel hitch.
5. A goose-neck trailer for above.
6. A gun rack for rear window to hold a rope, whip and curling broom.
7. Two yappy dogs to ride in back of pick-up.
8. A $40 horse and a $400 saddle.
9. A couple of cedar posts, some barb wire and 10 miles of twine to keep the two dogs company.
10. Credit from every bank within a 50-mile radius.
11. Credit from your father-in-law.
12. A good pocket knife suitable for whittling to pass time while at the auction ring.
13. A good wife who can tell you, plus any other man, where to go and what time to get there.

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AGRI-NEWS

FEB 1 3 1976
CANADIANA

January 12, 1976

FOR IMMEDIATE RELEASE

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Alberta
AGRICULTURE
COMMUNICATIONS

January 12, 1976

FOR IMMEDIATE RELEASE

1976 HOG OUTLOOK

It is quite possible that we will see hog prices back to the mid-$60 range during the first quarter of 1976, says Alberta Agriculture's marketing economist, Jim Dawson.

After this he predicts that prices will likely follow a similar trend to that of 1975, reaching a peak in late summer and then moving downward. "A tentative guess at the peak", he says, "would be around $70 to $75 a hundredweight. An even more tentative guess for the last half of the year would be for prices to head back to the low $60's or even to the high $50's."

It appears that there is unlikely to be enough pork in Canada or the U. S. to affect prices until the last three or four months of this year. However, beef supplies in Canada and the U. S. will probably show a 3 to 5 per cent increase over the large volume of 1975, and poultry production is expected to increase. It is this increase in the total meat supply that is expected to dampen prospects of prices being in the high $70's or $80's next summer.

Mr. Dawson points out that if the hog production volume follows the historical pattern, the present upward trend, which started in Canada in September, will continue. On the basis of the feed grain and hog price relationship," he says, "the rate of production expansion will be slower than past expansion periods with the U. S. and Eastern Canada moving into production much faster than Western Canada. The result will be that the current expansion phase of the cycle will likely last for at least 20 to 21 months. This situation would place the next hog production peak in the spring of 1977. However, the timing and the level of this peak will be greatly influenced by this fall's feed grain situation.

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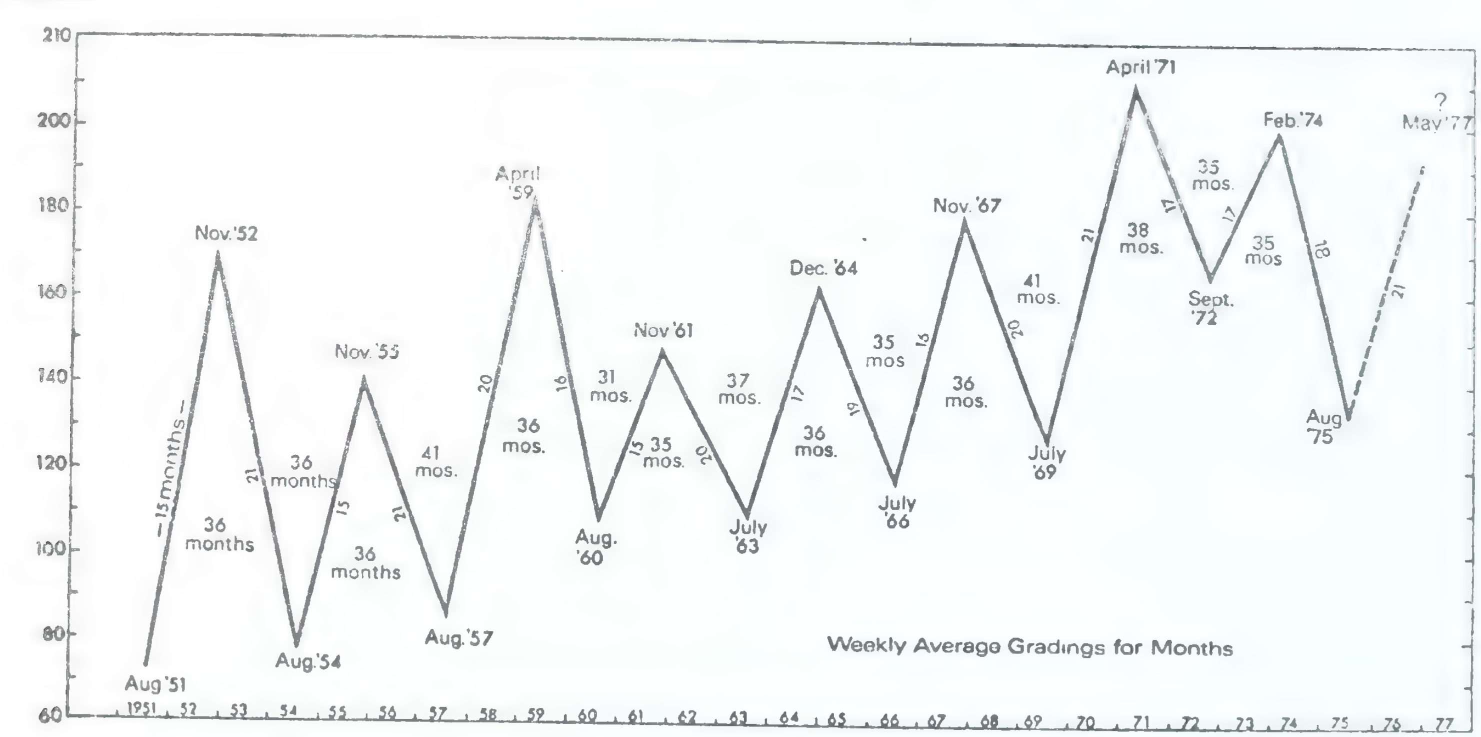
1976 Hog Outlook (cont'd)



Canadian Hog Production Cycle 1951 to 1977

NOTE: This graph shows only extreme fluctuations in hog gradings and does not account for monthly or seasonal variations.

The Canadian Hog Survey for October shows signs of a gradual recovery in hog marketings. Pigs under three months of age were down 15 per cent on October 1 which is an indication of lower market volumes in the first quarter of 1976. Second quarter marketings will reflect October-December farrowings which were down 6 per cent. Third quarter marketings will reflect January-March farrowings, expected to be down 2 per cent. The latest forecast from Agriculture Canada anticipated market volumes for the first quarter of this year to be down 9 per cent from 1975 and up 2 per cent for the April through September period.

The October survey also indicates that 1976 Canadian hog marketings will probably be slightly lower than they were in 1975.

1976 Hog Outlook

The U. S. December Hog Survey indicates that first quarter market volumes will be approximately 10 to 12 per cent below the same period in 1975. Marketings in the second quarter will likely be down by 8 or 9 per cent. In fact, farrowing intentions for December 1975 to February 1976 indicate the first real increase in hog production, which should become apparent by the late summer. On the basis of farrowing intentions, it appears that U. S. marketings in the last half of 1976 will be around 10 per cent above the last half of 1975 which would still be below 1974 market volumes.

Indications for 1976 point to a 3 to 5 per cent increase in U. S. hog production.

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January 12, 1976

FOR IMMEDIATE RELEASE

PERMIT FOR WORLD-SCALE AMMONIA PLANT APPROVED

Don Getty, minister of Energy and Natural Resources, has announced that the Alberta Government has granted Canadian Fertilizers Limited (Canadian Fertilizers) permission to use natural gas as a fuel and feedstock in a second ammonia plant to be constructed at its Medicine Hat complex.

Mr. Getty stated that the government's decision, which was based on a report prepared by the Energy Resources Conservation Board (ERCB), requires Canadian Fertilizers to meet certain conditions. Among these conditions are that Canadian Fertilizers share in any shortage of fertilizer that might exist in Alberta, ensure that processing of by-products from the project will be carried out in the province to the maximum extent possible, and meet all the requirements of the Clean Air Act, Clean Water Act, and the Land Surface Conservation and Reclamation Act and the regulations under the acts.

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Alberta

January 12, 1976

FOR IMMEDIATE RELEASE

INCIDENCE OF JOHNE'S DISEASE INCREASING

The incidence of an uncommon cattle disease called Johne's Disease seems to be on the increase in Alberta.

Extremely difficult to eradicate once it has become established, Johne's Disease (pronounced Yo--knees) is caused by a bacterium, Mycobacterium paratuberculosis. It has similar characteristics to those of the tuberculosis organism and is spread by cattle ingesting feed and water contaminated with the manure from an infected animal. Sheep and goats are also susceptible to this disease.

According to Frank Baker of Alberta Agriculture's veterinary services division, animals with Johne's Disease do not show any clinical signs for about two years. In the meantime, they act as carriers excreting the organisms in their manure for many months before they show any signs of sickness. In fact some animals may be carriers without ever showing signs of the disease.

Because of this long incubation period, it is rare to see the disease in an animal that is under two years of age. Dr. Baker says clinical signs seem to be initiated by stress, such as calving, foot rot or milk fever. The main clinical sign is a 'pea soup-like' diarrhea with an unpleasant odor and a severe loss of weight. Finally, the animal becomes nothing but skin and bones and dies, often from a secondary disease.

Although the clinical history is strongly suggestive, a conclusive diagnosis depends upon laboratory tests.

There is no effective treatment for Johne's Disease. Because its control and eradication are so difficult, some farmers give up in frustration and get out of the cattle business altogether. Cleaning and disinfecting the premises, closing pastures and testing are among the measures being used at the present time.

Agriculture Canada administers a control program the details of which are available to cattlemen upon request.

January 12, 1976

FOR IMMEDIATE RELEASE

STRAW CAN CAUSE IMPACTION OF THE RUMEN

Why do cows on a high straw ration sometimes die from impaction?

The reason is that the straw, being very low in digestible proteins, stays in the animal's system too long. Impaction is more prevalent during cold weather because the cows eat more straw than usual to keep warm. The amount of straw in the system can build up until it causes severe impaction, at which point there is little that can be done to save the cow.

According to Alberta Agriculture's animal nutritionist, Jerome Martin, feeding a balanced ration to make up the protein and energy deficiency is the key to preventing the problem. Here you have three alternatives. You can feed straw plus grain, straw plus grain and a protein supplement or straw plus a high protein legume hay.

Mr. Martin suggests supplementing straw that is fed free-choice with 8 pounds of grain, 5 pounds of grain plus one pound of a 32 per cent protein supplement or 50 per cent high protein legume hay per head per day.

Regardless of whether you feed grain or hay with the straw, you should also supplement the ration with vitamin A and minerals and make sure the cattle have plenty of water.

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FOR IMMEDIATE RELEASE

MINK FUR PRICES

Did you know that a mink coat is about the only item of clothing that has not gone up dramatically in price over the last 10 years? Suprisingly enough, you can still buy a beautiful mink coat for about $2,000, which is the same price you would have paid for it more than 10 years ago.

Wild fur prices, on the other hand, have increased dramatically over the last few years. Top quality coyote skins, for example, sold for $96 a skin at the first fur sale of the season, which was held at the Hudson Bay Company's new auction facilities in Montreal in December. Prices paid for some other types of wild fur increased by as much as 70 per cent.

"These prices for wild furs make Canadian mink a better and better buy", says Alberta Agriculture's fur farms supervisor, R. W. Gillies. A mink garment, he points out, will outlast almost any wild fur, except the Canadian beaver.

The December fur sale reports which have reached Mr. Gillies show that competition for the more than 200,000 Canada mink breeder pelts which were offered at the sale was keen, that 98 per cent of them were sold and that prices were up 20 to 22 per cent over a year ago.

Alberta mink pelts were not ready for this sale but will be offered at the second Canadian mink sale at the end of January. It is expected to have a record 600,000 pelts and should attract a large number of world buyers.

The question in Mr. Gillies mind is whether this encouraging interest in mink and a price hike like the one just witnessed are going to be enough to save the North American mink industry.

The Canadian average price for all pelts sold last year was just over $15 gross, which, in view of the current price increase, would bring the average price that can be expected this year to $18 a pelt.

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Mink Fur Prices (cont'd)

"However, with present costs of production, a price increase of this size," says Mr. Gillies, "is not going to make any mink farmer rich, but it may encourage those who have 'toughed' it out to date to carry on for another year".

Past records show that the average for all Canadian mink pelts sold during the last 10 years was only about $14.60 a pelt, while the average price for the previous 10-year period was $18.19. This means that mink farmers have taken about a $3.59 price drop per pelt in the last decade. Mr. Gillies says "It is little wonder that many mink farmers have gone out of business and it is questionable in light of spiraling production costs whether the current price rise is going to be enough to stem this drop-out trend ."

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January 12, 1976

FOR IMMEDIATE RELEASE

MUSK OX RESEARCH ASSOCIATION'S ANNUAL MEETING

Alberta's Musk Ox Research Association is holding its annual meeting at the Provincial Museum and Archives in Edmonton (12845 -- 102 Ave) at 1:00 p.m. on January 16.

The meeting will start with routine business and committee reports. These will be followed by a guest speaker, a short question period, and the election of officers, a board of directors and committees. The meeting will wind up with a call for new business and plans for the year ahead.

The president of the Musk Ox Research Association, Clarence Burpee, reports that the two-year old association has a very good membership. He points out that it is now generally accepted that the domestication of musk oxen in Canada will be of considerable benefit to the country.

"Several members," he says, "have been busy encouraging their provincial governments to help develop a musk ox industry. The Alberta Government has been the most receptive to this idea".

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January 12, 1976

FOR IMMEDIATE RELEASE

MELTING SNOW WITH FERTILIZER

Did you know that you can use urea fertilizer to melt snow on your sidewalk and driveway?

When sprinkled on snow it has the same melting effect as coarse salt. It also has the same limitation as salt in that it does not work when the temperature is below about 15°C.

Although it is more expensive than salt it has two important advantages over salt. It will not corrode vehicles as salt does and it will not damage grass or plants in an adjacent flowerbed when it runs off the driveway or walk during a thaw.

A 50-pound bag of urea costs about $5 and can be purchased from agricultural fertilizer outlets. Any fertilizer that is left at the end of the winter can be used to fertilize the lawn, says Alberta Agriculture's soils specialist, Doug Penny.

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January 12, 1976

FOR IMMEDIATE RELEASE

HOME BUSINESS CENTRE

If you have ever spent several frustrating hours hunting for a receipt to confirm a payment, tried to find an address or been unable to find your tax return records, you will realize the value of a well organized home business centre.

A well planned business centre simplifies the operation of the home and serves as the headquarters for operating a farm or other business. It is an ideal place for keeping acounts; carrying out financial planning; making out tax returns, keeping insurance records; keeping track of accounts payable and receivable; storing receipts and for doing all the other paper work your business demands.

With a little imagination it is possible to make a business centre in your home without spending a lot of money. An Alberta Agriculture publication entitled "Your Home Business Centre" outlines what is needed in a business centre and suggests ways of designing a home business centre. It also contains useful information on efficient filing and suggests an index for a home and farm filing system.

Copies of "Your Home Business Centre" can be obtained from your district home economist or from the publications office, Alberta Agriculture, Agriculture Building, 9718 - 107 Street, Edmonton, Alberta, T5K 2C8.

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FOR IMMEDIATE RELEASE

COMING AGRICULTURAL EVENTS

1976

Northwest Irrigation Operators' Conference, Rodeway Inn, Boise, Idaho	January 20 & 21
Alberta Pork Seminar (U of A Extension) Banff, Alberta	January 21 - 23
Canada Farm and Industrial Equipment Show, Coliseum, C.N.E., Toronto, Ontario	January 27 - 30
Alberta Dairymen's Association Annual Meeting, Hotel Macdonald, Edmonton, Alberta.	February 2 - 4
Canadian Blonde D'Aquitaine Association Board Meetings and Sale, Calgary, Alberta	February 3
Annual Meeting Weed Science Society of America Hilton Hotel, Denver, Colorado.	February 3 - 5
Western Stock Growers' Convention, Calgary Inn, Calgary, Alberta	February 4 - 7
Canadian Chianina Association Annual Meeting, Fairmont Hot Springs, Fairmont, British Columbia.	February 5 - 7
Canadian Charolais Association Annual Meeting, Quebec City, Quebec.	February 6 & 7
Annual Meeting of the Meat Packers Council of Canada Hotel Macdonald, Edmonton, Alberta.	February 9 & 10
Canadian Federation of Agriculture Annual Meeting, Hyatt Regency Hotel, Vancouver, British Columbia	February 9 12
Canadian Hereford Association Annual Meetings, Hotel Saskatchewan, Regina, Saskatchewan	February 11 - 13
Alberta Brown Swiss Association Annual Meeting, Calgary Inn, Calgary, Alberta	February 12
Canadian Brown Swiss Association Annual Meeting and Convention, Calgary Inn, Calgary, Alberta	February 12 - 14
Chianina World Congress, Florence, Italy.	February 18 - 22

- (cont'd) -

Canadian Barley & Oilseeds Conference, Winnipeg Inn, Winnipeg, Manitoba	February 19 & 20
Sprinkler Irrigation Association, Technical Conference, Kansas City, Missouri	February 22 - 24
Agricultural Policy Issues Conferences (U of A Extension) Banff, Alberta	February 22 - 27
Canadian Horticultural Council Annual Meeting, Chateau Laurier, Ottawa, Ontario	February 23 - 26
Canadian Gelbvieh Association Board Meetings & Sale, Calgary, Alberta	February 28
CENECA - International Water & Agriculture Symposium, Paris, France	March 3 - 5
Ag - Expo Fair Grounds, Lethbridge, Alberta	March 3 - 6
Alberta Horticultural Association Annual Meeting, Olds College, Olds, Alberta	March 5 & 6
Alberta Polled Hereford Club Annual Show , Sale and Meeting, Innisfail, Alberta	March 12 & 13
Sprinkler Irrigation Association, Agricultural Course, Calgary, Alberta	March 16 - 18
Canadian Western Stock Show and Sale, Exhibition Grounds, Edmonton, Alberta	March 20 - 27
Alberta Association of Municipal Districts and Counties Spring Convention, Hotel Macdonald, Edmonton, Alberta.	March 30 & 31
International Salon of Farm Machinery, Place Bonaventure, Montreal, Quebec	April 22- 25
World Charolais Federation, Johannesburg, South Africa	April 27 - May 1
Canadian Institute of Food Science and Technology, Annual Conference, Chateau Laurier Hotel, Ottawa, Ontario	May 30 - June 2
Alberta Women's Institute Annual Convention, Olds College, Olds, Alberta	May 31 - June 3

- (cont'd) -

Canadian Council on 4-H Clubs, Charlottetown, P.E.I.	Early June
Canadian Agricultural Extension Council, Charlottetown, P.E.I.	June
Alberta Institute of Agrologists Annual Convention, Lethbridge, Alberta	June 4 & 5
International Commission on Irrigation and Drainage, Banff, Alberta	June 5 - 12
American Co-op Educators Institute, Banff, Alberta	June 17 - 20
Federated Women's Institute of Canada Annual Meeting, University of P.E.I. Charlottetown, P.E.I.	June 20 - 26
Alberta Pork Congress, Exhibition Grounds, Red Deer, Alberta	June 22 - 24
Canadian Water Resources Association National Conference, Constellation Hotel, Toronto, Ontario	June 24 & 25
American Society of Agricultural Engineers, University of Nebraska, Nebraska, U.S.A.	June 27 - 30
7th International Sunflower Conference, Krasnodar, U.S.S.R.	June 27 - July 3
Canadian Agricultural Extension Council Conference, Charlottetown, P.E.I.	June 28 - 30
7th World Hereford Conference, Banff, Alberta	June 28 - July 2
The Royal Agricultural Show, Royal Agricultural Society of England, National Agricultural Centre, Stoneleigh, Kenilworth, Warwickshire CV8 2LZ,	Date not known
Canadian Society of Agricultural Engineering, Nova Scotia Hotel, Halifax, Nova Scotia	July 4 - 8
Agricultural Institute of Canada Annual Meeting, Halifax, Nova Scotia	July 4 - 8

- (cont'd) -

International Hereford Show, Calgary Exhibition & Stampede Grounds, Calgary, Alberta	July 8 & 9
First International Symposium (Feed Composition, Animal Nutrient Requirements and Computerization of Diets) Utah State University, Logan, Utah, U.S.A.	July 11 - 16
Canadian Home Economics Association Convention, Ottawa, Ontario	July 15 - 17
Klondike Days Agricultural Feature Show — Farmfair '76, Exhibition Grounds, Edmonton, Alberta	July 21 - 31
Canadian Federation of Agriculture, Truro, Nova Scotia	July 23 - 25
Conference of Canadian Ministers and Deputy Ministers of Agriculture, Hilton Hotel, Quebec, P.Q.	July 27 - 30
10th International Course on Vocational Education & Teaching in Agriculture, Gwatt & Zollihofen, Switzerland	July 29 - August 27
Dewberry Agricultural Society Mini-Fair, Dewberry, Alberta	August 18
World Simmental Congress, Pretoria, South Africa	August 25 - September 8
International Salon of Food and Agriculture, Place Bonaventure, Montreal, P.Q.	November 2 - 7
Canadian Simmental Association Annual Meeting, Toronto, Ontario	November 11 - 14
Alberta Association of Municipal Districts and Counties, Hotel Macdonald, Edmonton, Alberta	November 16 - 19
Royal Smithfield Show, Earlscourt, London, England	December

AGRI-NEWS

FEB 13 1976
CANADIANA

January 19, 1976

FOR IMMEDIATE RELEASE

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Alberta

January 19, 1976

FOR IMMEDIATE RELEASE

PLANT SCIENCE DEPARTMENT RECEIVES $20,000 GRANT

Henry Friesen of the federal research station at Lacombe and president of the Alberta Weed Advisory Committee (right) presenting the United Grain Growers' cheque for $20,000 to Dr. Bill Vanden Born, head of the University of Alberta's plant science department. The cheque is to be used for research into wild oat control.

The University of Alberta's department of plant science has been given a $20,000 grant fro

United Grain Growers Ltd. for wild oats research.

(cont'd)

Plant Science Department Receives $20,000 Grant (cont'd)

Dr. W. H. Vanden Born, chairman of the department, within the university's Faculty of Agriculture and Forestry, recently accepted the grant from Henry Friesen, heàd of the crop management and soil research section of the Canada Agriculture Research Station at Lacombe. Mr. Friesen made the presentation on behalf of the federal Wild Oats Action Committee.

Dr. Vanden Born said that the grant will be channeled through the Alberta Agricultural Research Trust, an action which will allow for matching funds from the provincial government. In early 1974 the department of plant science received a similar grant which was subsequently matched by the Alberta Agricultural Research Trust.

The current grant will be used to support a research technologist, a part-time post-doctoral fellow and possibly a graduate student. All aspects of the research will be conducted at the University of Alberta.

The grant is a result of the considerable interest which has recently been aroused due to extensive losses from wild oats in Western Canadian grain fields. Wild oats are considered to be the number one weed in the Prairies. They are strong competitors with grain crops and significantly reduce yields when their (wild oats) populations reach 10 to 40 or more plants per square yard.

The researchers will be carrying out a detailed study on the factors involved in both the co-operative and the antagonistic behavior of herbicide combinations on wild oats.

The various herbicides, which can increase the economic yield of crops by reducing the competition of wild oats, are apparently more effective when used in an integrated system than when used individually.

"We anticipate that these experiments will provide a proper understanding of the behavior of the herbicide mixtures, and that such understanding, in turn, will result in the preparation of more effective and likely more economical recommendations for wild oats control," Dr. Vanden Born says.

January 19, 1976

FOR IMMEDIATE RELEASE

CANADIAN CATTLE PRICE PROSPECTS

Fed beef prices are not likely to show any improvement at least until the fall supply of short keep feedlot placements has gone to market -- probably towards the end of February.

This is the opinion of Alberta Agriculture's marketing economist, Jim Dawson. He believes that steer prices are likely to drop to the $40 to $36 a hundredweight level if the present rate of cow and other non-fed beef slaughter continues. Heifers are already selling in the mid-$30 range.

A fed beef price in the mid-$40 range is predicted for the second quarter of this year and is expected to go higher in the summer. Marketings during this period will reflect the mix of medium and heavy weight feeder cattle placed on feed during the winter months. Also, cow slaughter should have tapered off to some extent by the second quarter.

The price spread between steers and heifers is also expected to have narrowed by the second quarter as the supply of heifers and light carcasses is likely to be less than it was in 1975.

Feeder Cattle

Feeder cattle prices are not likely to improve much during the first quarter of 1976, reflecting fed beef prices. However, Mr. Dawson expects prices for medium to heavy quality feeder steers to return to the mid-$40 range later in the second quarter of the year. The feeder cattle situation for the fall of 1976 looks more optimistic than it did in 1975, but the key to the recovery of feeder cattle prices will still be the feed grain situation next fall.

Cows

No improvement is seen for cow prices until slaughter volumes decrease, which is not likely to happen until the second quarter of 1976. However, it is expected that by early spring D1 and D2 cows will be selling close to the high $20 level. The volume of cow slaughter should be down by then.

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Canadian Cattle Price Prospects (Cont'd)

Another factor which will help to improve local cow prices is that the price for imported manufacturing beef is expected to be higher this year than it was in 1975.

Fed Beef Supply Prospects

The first quarter of this year will show some seasonal increase in fed beef marketing as a result of last fall's short-keep placements. Mr. Dawson expects the 'bulge' in marketings to be shorter lived (possibly ending in mid-February) than was the case in 1975. More calves have gone on feed and a larger portion of heavy feeder cattle are on corn silage, especially in Eastern Canada. The large volume of baby-beef and lightweight slaughter in the last months of 1975 should also help to reduce the potential fed beef supply during the first half of this year. The level of cow and non-fed cattle slaughter is affecting finished beef prices at the present time, but this source of slaughter cattle is expected to drop off within the next couple of months.

The United States Department of Agriculture's December Livestock and Meat Situation Report estimates fed beef marketings for the first quarter of this year will be up 5 to 7 per cent compared with the same period in 1975, and that they could possibly be up by 15 per cent in the second quarter. This would still be below 1973 market volumes of fed beef.

Mr. Dawson believes that the level of non-fed beef slaughter will be an important determining factor in 1976 beef prices. Total red meat supplies should be up slightly this year from 1975 levels, reflecting heavier beef carcasses, a small increase in the pork supply and some increase in poultry production.

Cattle Inventory

In view of the large increase in Canadian cow and heifer slaughter, plus the export of cows to the U. S., it appears that the Canadian cow herd will show a small decrease when the January 1 Livestock Survey is published. However, even with this slight reduction in the cow herd, the 1976 calf crop will still be the second largest on record.

January 19, 1976

FOR IMMEDIATE RELEASE

NEW FEDERAL INVESTMENT TAX CREDIT

What does the recently passed federal investment tax credit law mean to farmers?

The investment tax credit allows both individual and corporate tax payers to reduce their federal tax payable for 1975 and subsequent taxation years by 5 per cent of the cost of all qualifying assets acquired between June 24, 1975 and June 30, 1977.

Alberta Agriculture's tax specialist, Len Fullen, reports that the tax credit applies to most items included in a farmer's capital cost schedule that are purchased between June 23, 1975 and July 1, 1977. It covers new buildings used for the farm business, farm equipment and machinery and leased buildings, equipment and machinery used in the farm business. The tax credit, however, does not apply to new cars or to small trucks, to new milk quotas, to used machinery that is purchased or to the cost of tile drainage. It still has not been determined whether it applies to a grain truck or to a large truck used for hauling cattle.

Another questionable area concerns down payments made on equipment prior to June 24, 1975. If, for example, a farmer put a down payment on a tractor before June 24, 1975 and took delivery of it in September, the tractor would be eligible for a tax credit providing the deposit slip did not refer to the tractor by such specifications as model number, serial number, etc. The reasoning here seems to be that without such specifications as serial number, etc.,the farmer is not deemed to have actually purchased the tractor until he takes delivery of it and receives a bill of sale.

In the case of farm buildings that were already under construction on June 23, 1975, only those costs incurred after that date are eligible for the tax credit. However, the entire cost of buildings begun between June 23, 1975 and July 1, 1977 are eligible for the tax credit.

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New Federal Investment Tax Credit (Cont'd)

Although the size of claim allowed under the investment tax credit provision is stated rather vaguely in the 1975 Farmers' and Fishermen's Guide, in actual fact, the deduction is limited in any one year to the lessor of:

(a) the federal tax payable

(b) $15,000 plus one-half the difference between $15,000 and the federal tax payable.

For most farmers this means that the credit will be deductible in full against the amount of federal tax payable.

Mr. Fullen says a minor drawback to the provision is that the amount of capital cost allowance will be reduced by the amount of the tax credit. In other words, if the investment cost is $20,000 and the tax credit is $1,000, the starting point for capital cost allowance will be only $19,000.

Mr. Fullen suggests that a farmer who has made an investment in assets that qualify for the tax credit, but is in a very low taxable position for 1975, may be wise to postpone claiming the tax credit until a year when he expects to be in a higher taxable bracket. Any unused tax credit or part of a tax credit can be carried forward for up to five years.

A taxpayer who does not claim his tax credit in the year of an investment would claim his capital cost allowance on the total amount of the investment. Then in the year that the tax credit is claimed, he would be required to submit an adjusted tax form, recalculating his capital cost allowance for the previous year or years. Although this procedure involves extra work, it could save a few tax dollars!

January 19, 1976

FOR IMMEDIATE RELEASE

SWEET CLOVER POISONING

Alberta Agriculture's beef cattle extension veterinarian, Frank Baker, warns livestock producers not to feed mouldy sweet clover hay or mouldy silage. Both can be lethal to livestock, especially cattle.

Dr. Baker points out that sweet clover and silage contain a chemical called coumarol which is converted by moulds to dicoumarol, a chemical that prevents blood clotting and causes hemorrhaging.

He stresses that the amount of mould present in the feed is no indication of its toxicity. He also says that some sweet clover varieties are more prone to producing dicoumarol than others.

Signs of sweet clover and silage poisoning include anemia, listlessness, and subcutaneous (under the skin) swellings. The blood in these animals will not clot after such surgery as that entailed in castration and dehorning, and it will not clot after calving injuries or wire cuts. Although calves may seem to be unaffected by the condition they may die at birth or soon after.

The best way to deal with sweet clover or silage poisoning is to stop feeding mouldy material immediately. If severe signs of sickness are present, the animal or animals should be given blood transfusions and vitamin K.

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January 19, 1976

FOR IMMEDIATE RELEASE

APPLICATIONS FOR BEEF STABILIZATION PROGRAM

Have you applied for your beef stabilization payment? These payments are not automatic. Cattlemen who sold A, B or C grade steers and heifers for slaughter between August 12, 1974 and August 11, 1975 are eligible for a stabilization payment.

If you qualify you should get the one-page claim form from your stockyards, packing plant, abattoir, district agriculturists or a federal livestock division office and return it as soon as possible to the Agricultural Stabilization Board in Ottawa.

All claims must be accompanied by proof of sale and slaughter. This proof will normally be in the form of a scale ticket or a sales invoice. They state the type of animals sold (cows and bulls do not qualify), the number of animals, the date of sale, the name of the slaughtering plant, the liveweight or dressed weight, the selling price and the names of the buyer and seller.

If the cattle were sold through a drover or another intermediary agent, you will need a statement from that agent verifying that the cattle were slaughtered within 45 days. If they were sold for custom killing, you must submit a receipt from the abattoir and from the person to whom the carcasses were sold.

The stabilization payment is 48¢ per hundredweight based on liveweight, regardless of the price you received when you sold the cattle. All dressed weights are converted to the liveweight equivalent for determining the stabilization payment.

You can expect to receive your payment within a month, providing you fill out the claim form correctly. The sales receipts you submit with your claim form will be returned.

According to Agriculture Canada, there were 2.5 million cattle slaughtered in Canada during the period covered by the stabilization program.

Alberta

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January 19, 1976

FOR IMMEDIATE RELEASE

FERTILIZER USE CONTINUING TO INCREASE

Estimates for 1975 show that Alberta farmers used 650,000 tons of fertilizers on their crops last year. These estimates represent a 14 per cent increase (82,000 tons) over the amount of fertilizer used in 1974.

Alberta Agriculture's soils specialist, Doug Penny, says the 1975 increase is consistent with the long-term trend in fertilizer use in this province. He points out that it has increased every year since 1955 except for 1969 and 1970 when it dropped by 30 and 15 per cent respectively. Poor grain markets were responsible for the decrease during that period.

The two largest single increases occurred in 1973 and 1974 when the annual increase amounted to more than 100,000 tons. This was the period when the demand for grain and grain prices really started to pick up after the 1969 and 1970 slump.

Mr. Penny believes that the use of fertilizer in Alberta will continue to increase, providing the demand for cereal grains remains strong.

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January 19, 1976

FOR IMMEDIATE RELEASE

VEGETABLE PRODUCTION IN ALBERTA

In Alberta vegetable growers are classified into two categories on the basis of their marketing method. These categories are commercial growers and market gardeners.

According to Alberta Agriculture's extension horticulturist, Ralph Trimmer, there are between 70 and 90 commercial growers in the province, all of which sell produce through a wholesaler or other type of dealer. They usually grow fewer crops than the market gardener and concentrate on those crops which are most suitable to our climatic conditions and for which there is the greatest demand. Commercial vegetable producers generally grow a larger acreage of the crops they produce than is the case with the market gardener. Commercial growers are also mechanized.

Storage, washing, grading and packaging machinery are all essential parts of a commercial grower's operation. He may have his own handling facilities or he may use a common handling facility.

"Continuity of supply and consistent quality," says Mr. Trimmer, "are essential in commercial vegetable production." Since it is important to extend the supply season as much as possible, commercial vegetable producers usually specialize in the less perishable vegetables which can be stored.

Market gardeners, of which there are at least 200 in Alberta, sell directly to the consumer. They do this in a number of ways. They may harvest their produce themselves and sell it on their own premises ('farm gate sales'), they may sell it at a farmers' market or they may sell it by the 'pick-your-own' method. In the latter case the customer harvests his own produce. Since some crops lend themselves more readily to the 'pick-your-own' method of harvesting than others, many market gardeners use a combination of marketing methods.

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Vegetable Production in Alberta (cont'd)

Market garden acreages range from less than one acre to about 30 acres. In Alberta the one to three-acre operation is common. Most market gardeners grow many different kinds of vegetables to provide their customers with a wide variety of choices. Although closeness to a large urban centre is an advantage, Mr. Trimmer reports that interest in market gardening is increasing throughout the entire province.

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CORRECTION:

"Coming Events" (January 12 issue "Agri-News")

The Western Stock Growers' Convention will be held at the Sheraton Summit Inn, Calgary on February 4 - 7 (not in the Calgary Inn as stated).

CORRECTION:

The second sentence in the second paragraph of the article entitled "Melting Snow With Fertilizer" (January 12 issue of "Agri-News") should read: "It also has the same limitation as salt in that it does not work when the temperature is below –15° C." (not 15° C. as stated in the article).

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January 19, 1976

FOR IMMEDIATE RELEASE

SALARIES PAID TO FARM WIVES SHOULD BE TAX DEDUCTIBLE

Alberta Agriculture's district home economist at Stettler, Jan Williams-Russel, reports that the Saskatchewan Federation of Agriculture has presented a brief to the federal government requesting that when a salary is paid to a farm wife it should be eligible for a tax deduction.

She points out that at the present time a farmer can deduct the wages he pays to his children or to his neighbor's wife as an income tax expense, but that he cannot deduct a wage that he pays to his own wife as an expense.

Len Fullen, taxation specialist with Alberta Agriculture, says that under the existing income tax law a farmer can only deduct the salary he pays his wife as an income tax expense if the farm has been set up as a corporation.

The Saskatchewan Federation of Agriculture is also requesting that farm wives be allowed to pay into the Canada Pension Plan in the same way that other employed workers in Canada do.

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Alberta

January 19, 1976

FOR IMMEDIATE RELEASE

PLANT ARCHITECTURE

Up to a 30 per cent increase in annual yield has been obtained in Britain through the selection of grasses on the basis of the length and erectness of their foliage.

A release received by Alberta Agriculture from the British Agricultural Research Council shows that grasses with long leaves and erect tillers use the sun's rays more efficiently than shorter, less erect grasses because they spread the rays over a larger surface of leaf area. This situation allows greater photosynthesis to take place. Photosynthesis is the process whereby the sun's energy is converted by the chlorophyll in the plant's leaves into chemical energy for plant growth.

It is important, therefore, that as much light as possible be trapped and used by a crop. Obviously, any light that strikes the bare ground is wasted, and any leaves that do not receive light are non-productive.

As a crop stand develops, an increasing proportion of the incoming light is intercepted by the foliage until in a mature stand, all the light is used and the lower leaves may even be completely shaded.

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January 19, 1976

FOR IMMEDIATE RELEASE

THE MANAGEMENT OF HAY AND PASTURE CROPS

The revised publication, "Hay and Pasture Crops for Alberta", is designed to help farmers get the best yields from their forage production and to avoid losses that frequently occur through faulty management.

It discusses the types of forage that are best suited to the brown, dark brown, black and grey wooded soil zones and those that are recommended for irrigated land as well as their management.

The publication also contains tables of suggested grass and legume mixtures. These tables outline recommended seeding rates. The section on pasture management covers such topics as continuous grazing, rotational grazing, strip grazing, zero grazing and complementary grazing.

The final section deals with harvesting and handling a hay crop. It covers alfalfa dehydration, loose hay stacks and chopped hay.

Copies of "Hay and Pasture Crops for Alberta" can be obtained from your district agriculturist or from the publications office, Alberta Agriculture, Agriculture Building, 9718 – 107 Street, Edmonton.

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January 19, 1976

FOR IMMEDIATE RELEASE

WINTER SURVIVAL FOR STRANDED DRIVERS

Have you ever been caught in a blizzard? If you have you will realize the importance of being prepared!

The Alberta Motor Association recommends the following basic equipment for winter travellers: a tow rope, battery jump cables and tire chains (with installers). Without these,the offer of assistance from a passing driver could be useless, says the Association.

Winter travellers should also carry a snow shovel, flares, a flashlight, a window scraper, a first aid kit and a sleeping bag. Recommended emergency clothing include a parka with a hood, spare mitts and boots.

Anyone driving a long distance under winter conditions would be wise to carry such things as dried fruit, raisins and dehydrated emergency rations.

The Alberta Motor Association also advises stranded drivers to stay with their car unless a house or some form of shelter is within visible distance and is easily accessible.

Remember, if you leave your car engine running, close the air vents, open a window and make sure that the snow is not constricting the exhaust pipe.

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FOR IMMEDIATE RELEASE

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Alberta
AGRICULTURE

January 26, 1976

FOR IMMEDIATE RELEASE

DEADLINE FOR COW-CALF ADVANCE PROGRAM APPLICATIONS

Alberta's agriculture Minister, Marvin E. Moore, says he is pleased with the number of farmers who have taken advantage of the interest-subsidized cow-calf loans under the 1975 Cow-calf Advance Program.

Tabulation of loans issued to December 31, 1975, indicates the 6,500 farmers have applied for loans totalling $23 million. This compares with 1974 figures of 12,500 farmers borrowing approximately $40 million during the same time period. It appears that participation in the program is relatively widespread as farmers from all parts of the province are taking advantage of it.

The program is designed to provide working capital to carry light weight calves to heavier weights to avoid low market prices.

Loans are available to farmers on the basis of $75 per calf on 80 per cent of their 1975 calf crop to a maximum of $6,000 per producer and are available to all cow-calf producers including purebred breeders and dairy producers.

The difference between the 1975 program and its predecessor is that the loans, instead of being interest free, now carry an interest rate of 7 per cent. Also, producers are required to repay any previous cow-calf loans that they had received.

The true interest rate is one per cent over the prime lending rate. The Government of Alberta pays the difference between the two rates.

Mr. Moore urges farmers to assess their present feeding program to determine whether or not the Cow-calf Advance Program applies to their operation. He added the applications will be accepted until the end of January, 1976.

January 26, 1976

FOR IMMEDIATE RELEASE

SEED CLEANING PLANTS UPGRADING PROGRAM

Alberta Agriculture will place emphasis on upgrading its present 75 co-op seed cleaning plant facilities rather than on rebuilding and new construction of co-op cleaning plants, said Dallas Schmidt, acting minister of agriculture.

New construction will be limited to a maximum of two plants per year until 1980 in developing areas and areas not adquately served by co-operative or private facilities. The location of future plants will be determined by individual feasibility studies. One hundred thousand acres of annual cereals is considered to be the minimum requirement for supporting a plant. (Plant seed cleaning average in 1974-75 was 317,000 bushels.)

Present costs for large steel plants with a double line of machinery range as high as $420,000. These costs have made the rebuilding and construction of new plants almost impossible to consider at this time. "So most plants have or are considering upgrading", said Mr. Schmidt.

The upgrading policy entails an equal sharing of costs by the government of Alberta, the municipality concerned and the local seed cleaning association. The maximum government grant on approved items is $15,000.

Items include additional cleaning and treating equipment, such as larger legs to improve the plant's cleaned seed 'throughput' and seed quality. Dust storage and collection equipment to meet environmental regulations will also be covered by the grant as will analytical equipment for quality control.

Still other items which are covered are sewage and water facilities, repairs to the basic plant structure, and additional storage for cleaned and non-cleaned grain.

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Seed Cleaning Plants Upgrading Program (cont'd)

To be eligible for a grant the plant will have to show that its seed cleaning rates cover both operating and fixed costs.

At the present time Alberta farmers, who have over half their seed cleaned by co-operative seed cleaning plants every year, are paying 50 per cent less for this service than is paid by farmers in the rest of Canada for the same services, said Mr. Schmidt.

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January 26, 1976

FOR IMMEDIATE RELEASE

ALBERTA FARMERS HAVE LOWEST PER GALLON FUEL COSTS

"Alberta farms continue to have the lowest per gallon fuel costs in Canada and we plan to keep it that way", says Alberta's agricultural minister, Marvin E. Moore.

He added that "The entire saving to the farm community now amounts to about $17 million annually."

Last year Alberta farmers purchased 214,000,000 gallons of fuel eligible for the discount. The provincial cabinet recently approved a special warrant for $2 million and authorized the transfer of funds amounting to another $2.3 million to cover the increased costs of the farm fuel distribution allowance. This was necessitated by the September, 1975 increase in the allowance, which raised it from 5¢ to 8¢ per gallon, to cushion farmers against rising fuel costs.

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January 26, 1976

FOR IMMEDIATE RELEASE

TURF AND FORAGE SEED SITUATION

An early recovery in the presently depressed turf grass market is not expected, according to the Canadian Seed Growers Association (CSGA).

Canada's estimated 1975 production of 21 million pounds of creeping red fescue, plus a large carryover on farms and in the hands of seed dealers, does not indicate an improvement in the turf grass market in the near future. Hence, a reduction in the production of commercial creeping red fescue appears desirable, but an increase in the production of certified creeping red fescue, free of wild oats, is strongly recommended by CSGA.

European Economic Community (EEC) regulations permit only the importation of certified creeping red fescue seed and require that it be free of wild oats. Because of these restrictions Canada will lose almost all her traditional British creeping red fescue market when Britain enforces the EEC regulations in July of this year.

Denmark, Canada's biggest competitor in the creeping red fescue market, has a considerable carryover of creeping red fescue and Kentucky bluegrass from last year's crop. In spite of a reported 20 to 35 per cent reduction in her planned 1976 acreage, Denmark will still have plenty of seed to start the 1976-1977 crop year.

Holland is in the same position as Denmark and plans a similar grass seed acreage reduction.

The American carryover of grass seed will be somewhat less at the beginning of the next crop year compared with the beginning of the last crop year. A 20 to 30 per cent reduction in creeping red fescue and Kentucky bluegrass is anticipated in the U.S. this year.

- (cont'd) -

Turf and Forage Seed Situation (cont'd)

Forage Seeds

In most cases the drop in forage seed prices has not been as dramatic as it has been for turf grasses.

Overall world production of forage seeds has been fairly normal except for meadow fescue. Use of this forage is declining,and Canada again has to compete with cheap Danish production.

Although Canadian bromegrass production was small last year, the United States harvested a fairly large crop in 1975 which will adversley influence the Canadian market. However, certified seed, free of wild oats, is in demand for export.

The demand for certified timothy is expected to remain good for the time being. Although global production remains fairly constant, acreage has decreased in the last two years.

The supply of alsike clover seed produced in 1975 will be sufficient to cover all the demand in 1976. Use of this forage is declining.

Canadian production of wheatgrasses is estimated to be in excess of 1 million pounds, and all certified seed should be absorbed by the market.

More certified Altaswede red clover seed is needed for the British market, but commercial seed production should not be increased.

If you would like to receive the CSGA forage seed news letter, contact E.T. McLaughlin, Secretary Manager, Box 8455, Ottawa, Ontario.

January 26, 1976

FOR IMMEDIATE RELEASE

USES OF THE INCOME TAX ACT'S LIVESTOCK INVENTORY PROVISION

If you keep livestock and file your income tax return on a cash basis, you should be using the livestock inventory provision of the federal Income Tax Act to adjust your taxable income from one year to the next. The use of this provision over a period of years can save you money!

Alberta Agriculture's taxation specialist, Len Fullen, points out that it allows a farmer to bring an amount up to the fair market value of his total livestock inventory into his farming income in any given year to offset a net loss. However, since the procedure is only a paper transaction, the same value of livestock inventory that was added to income in the first year must be deducted from the income of the second year.

If the second year's income is still in a loss position after the livestock inventory of the first year has been deducted, livestock inventory can again be brought in to offset this loss. The livestock inventory provision can be used each year until the net earnings from the farm show a profit after the previous year's livestock inventory deduction has been made.

At this point it may pay to bring livestock inventory in again if the farmer expects a high income the following year. If, on the other hand, he expects a low income the following year, it would not be necessary to include any livestock inventory provision in the current year's income.

The provision applies to all cattle, horses, sheep and swine, providing they are not included in a Basic Herd. A feedlot operator, for example, can bring the fair market value of his feeder cattle into his income in any given year.

Following are some examples of situations where it might be advantageous to use the livestock inventory provision.

- (cont'd) -

Uses of the Income Tax Act's Livestock Inventory Provision (cont'd)

. A farmer has had such a low taxable income that he has been unable to fully benefit from all his allowable tax exemptions (personal, medical and charitable). By bringing livestock inventory into his income in a low income year, he could then qualify for these exemptions, providing, of course, that his livestock inventory was large enough.

. A farmer who is expanding his farm has been in a net loss position for several years. He can offset these losses now by using the livestock inventory provision. It is true that he may be able to recoup the losses in the future through income averaging, but he would be more sure of covering them through the use of the livestock inventory provision.

. A farmer has not had a high enough income to allow him to make maximum contributions to the Canada Pension Plan which he must do every year to fully benefit from it. If his livestock inventory was large enough, he could use it to bring his net income up to the point where he was eligible to make maximum contributions.

. A farmer who has been in a loss position over the last four years plans to use the five-year block averaging provision. He could use the livestock inventory provision this year to offset the losses of the previous years.

. A farmer plans to sell his farm next year. He can bring his livestock inventory into this year's income, which will put him in a higher income tax bracket this year, but will reduce his total tax over the two year average (this year and next year). If he is eligible, it would be to his benefit to use the five year block averaging position in conjunction with the livestock inventory provision, Mr. Fullen says.

. A farmer is in a low income tax bracket, but expects to have a high taxable income a year or two from now. He could bring sufficient livestock inventory into his present income to place himself in a slightly higher tax category now, and thereby avoid a high rate later on.

- (cont'd) -

Uses of the Income Tax Act's Livestock Inventory Provision (cont'd)

Prepaying the tax on future income does not pay in all cases, however. "Depending upon investment opportunities" says Mr Fullen, "it may be more expensive, in terms of losing the use of the money and the interest it could have accumulated if invested, than the overall tax savings."

January 26, 1976

FOR IMMEDIATE RELEASE

ALBERTA FIRMS NAMED AS AFFILIATED SUB–AGENCIES FOR CANFARM

Alberta Agriculture has named a number of Alberta firms as affiliate sub-agencies for CANFARM in Alberta.

CANFARM is the national farm management and accounting system in which approximately 1800 Alberta agricultural producers are presently registered through Alberta Agriculture and the Farm Credit Corporation.

The use of the additional agencies will expand the number of clients that can be served on the CANFARM system in Alberta and will offer a broader choice of sources from which CANFARM supplies may be obtained. Firms participating in the program will work closely with Alberta Agriculture and provide a competent staff of qualified accountants or professional agrologists to supervise the work related to the implementation of the CANFARM program.

Various services offered to farm clients by the participating firms include: registration, instruction on data input and recording requirements and a review and checking of data forwarded to the CANFARM Service Agency. Other related services such as the preparation of income taxes and consultation for financial or business planning may also be provided.

This year, Alberta Agriculture will be offering CANFARM's new double entry record keeping system through these firms.

The following firms have been approved to offer CANFARM in the province for the calendar year 1976 with further extension subject to the approval of the CANFARM agency coordinator, Alberta Agriculture. Farmers wishing to obtain the CANFARM record system through private business may contact any of the following firms. Before registering, however, farmers should obtain a written quotation of the annual fee from the firm and, at year end, request a detailed invoice of services provided.

- (cont'd)

[illegible] Firms Named as Affiliated Sub-Agencies for CANFARM (cont'd)

ANDERSON, MACOR & CO.	#400, 4808 Ross Street Red Deer, Alberta
BEVAN, HUTCH & CO.	Box 466 Brooks, Alberta
BURRINGTON, HEYWOOD & HOLMES	205, 4826 - 49 Street Red Deer, Alberta
BURRINGTON, HEYWOOD & HOLMES	Rocky Mountain House Alberta
W.F. CLELLAND & CO.	303 Lancaster Building 304 - 8 Avenue S.W. Calgary, Alberta
COLLEAUX & MILLS	Box 2246 Taber, Alberta
COWIN, MCKINNON & CO.	#4, 3515 - 17 Avenue S.W. Calgary, Alberta
DELOITTE, HASKINS & SELLS	602 Bank of Montreal Building 10089 Jasper Avenue Edmonton, Alberta
DELOITTE, HASKINS & SELLS	700, 202 - 6 Street S.W. Calgary, Alberta
DODSWORTH & DEY	#4 Eaton Building Camrose, Alberta
FARM & RANCH MANAGEMENT CONSULTANTS	631 - 42 Avenue S.E. Calgary, Alberta
HUDSON & CO.	775 Barron Building 610 - 9 Avenue S.W. Calgary, Alberta
MACGILLIVRAY & CO.	5th Floor, Melton Building Edmonton, Alberta
MACKENZIE, MATTHEW & CO.	5914 Gaetz Avenue Red Deer, Alberta

Alberta Firms Named as Affiliated Sub-Agencies for CANFARM (cont'd)

STUART MILLER CO.	3934 - 1A Street S.W. Calgary, Alberta
PEAT, MARWICK & MITCHELL & CO.	Box 1059 Ponoka, Alberta
PRICE, WATERHOUSE & CO.	25th Floor, One Palliser Square Calgary, Alberta
RANGELAND BUSINESS SERVICES LTD.	Box 248 High River, Alberta
RUSNELL & CO.	420, 10603 - 107 Avenue Edmonton, Alberta
R.N. SAUNDERS & CO.	4917 - 50 Avenue Camrose, Alberta
SAX, ZIMMEL, STEWART & CO.	Box 1200 Westlock, Alberta
THE SIBBALD GROUP	8315 - 105 Street Edmonton, Alberta
THORNE RIDDELL & CO.	1400 Bow Valley Square #2 Calgary, Alberta
THORNE RIDDELL & CO.	12th Floor, Royal Trust Tower Edmonton, Alberta
THORNE RIDDELL & CO.	#500 Lethbridge Centre Lethbridge, Alberta
TOUCHE, ROSS & CO.	#500, 600 - 6 Avenue S.W. Calgary, Alberta
WALMAX SERVICES	256 Bonnie Doon Shopping Centr Edmonton, Alberta
WATKINSON, HANHART, DUDA & CO.	Box 698 Lethbridge, Alberta

- (cont'd) -

Alberta Firms Named as Affiliated Sub-Agencies for CANFARM (Cont'd)

NEW APPROVED AGENCIES:

FARVOLDEN & WIGGINS	208, 736 - 8 Avenue S.W. Calgary, Alberta
MCCULLOCH & MCCULLOCH	2nd Floor, 9526 Jasper Avenue Edmonton, Alberta
BRYCE SMITH	145 - 5 Avenue West Bow Island, Alberta
WISHART & BEFUS & CO.	P.O. Box 777 Okotoks, Alberta

Other firms interested in finding out more about CANFARM or in possibly offering CANFARM as part of their service should get in touch with:

Mr. Charles Pearson
Agricultural Economist
Farm Records & Analysis
Farm Business Management Branch
Alberta Agriculture
9718 - 107 Street
Edmonton, Alberta
T5K 2C8

Telephone: 427-7314

January 26, 1976

FOR IMMEDIATE RELEASE

BE CAREFUL WHICH PLASTIC PIPE YOU USE

Never use plastic pipe that was manufactured for distributing gas for distributing water that is intended for livestock or human consumption warns Ron Johnston, Alberta Agriculture's water and sewage specialist.

He explains that plastic pipe which is manufactured for the province's rural gasification program may contain harmful quantities of arsenic and lead. Both these chemicals may present a serious health hazard if plastic pipe containing them is used in a water system.

Both types of plastic pipe are marked "C.S.A. Certified". The difference between the two is that the gas pipe is stamped every four feet with the words "P.E. Gas Pipe".

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January 26, 1976

FOR IMMEDIATE RELEASE

TWO ADDITIONAL ARDA VETERINARY CLINICS

Two more veterinary clinics, completed under the federal-provincial Agricultural Rehabilitation Development Act (ARDA) agreement, are now open for business.

They are located at Valleyview and Manning. Dr. David Cook has recently begun practising from the Valleyview clinic, and the Manning clinic is being manned by veterinarians from the Fairview clinic. At the present time the Manning clinic is only open three days a week.

The two new clinics bring the number of clinics completed under the ARDA agreement to four, and further reduces the areas in Alberta which do not have adequate veterinary services.

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January 26, 1976

FOR IMMEDIATE RELEASE

HOME ECONOMIST APPOINTMENTS

The director of Alberta Agriculture's extension division, John Calpas, has announced the appointments of one regional home economist and two district home economists.

The regional home economist is Yvonne Kennedy who has been appointed to the Red Deer region where she will coordinate the home economics programs offered by the region's district home economists. She will also help new district home economists to become established in the region.

Mrs. Kennedy joined Alberta Agriculture's home economics service in 1969. She is a graduate of the University of Alberta and grew up on a farm in the Innisfail area.

Lu Ellen Morton has been appointed district home economist at Westlock.

She is a native of Manitoba, and graduated from the University of Manitoba last year with a B. Sc. (home economics). Her summer jobs included home economics extension work with the Manitoba Department of Agriculture and employment on a Manitoba government research housing project for the elderly.

Marian Williams has been appointed district home economist at Vermilion.

She comes from Camrose and attended the University of Alberta, graduating last year with a B. Sc. (home economics). The summer prior to graduation, she worked as a summer assistant to the district home economist at Olds. Last year she worked for a short time with Alberta Agriculture's nutrition and food marketing branch.

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Alberta

WHAT'S NEW
IN PUBLICATIONS

ALBERTA AGRICULTURE

VOL 11, NO. 1
JANUARY, 1976

FS 732-1	Tower Silo Foundations. 1975. Factsheet.
FS 120/60-1	Principles of Forage Conservation. 1975. Factsheet.
FS 120/32	Varieties of Hay and Pasture Crops for Alberta. Revised 1976. Factsheet.
	Homedex - filing guide. Revised 1975. Note: limited distribution.
420/41-12	Beef Cattle Performance Test - 16th Annual Report, 74/75. 1975. 38 p.
	Green Certificate Program. 1975. Fold-out brochure and application form.
871	Assistance Available for Alberta Farmers. Revised 1975. 13 p.
705-1	Think Metric - (workbook). 1975. Not stocked - Available only on aggregate Regional request for bulk reprint. 18 p.
FS 736-1	Grain Dryers Types & Models. 1975. Factsheet.
832	Sources of Farm Business Credit. Revised 1975. 15 p.
	Pack a Good Lunch - (wall chart). Revised 1975.
120/20-1	Hay & Pasture Crops for Alberta. Revised 1975. 18 p.
FS 149/31	Rapeseed Varietal Development Outlook for 1975. 1975. Factsheet.
FS 744-1	Overwinter Storage of Sprayers. 1975. Factsheet.
FS 684	Richardson Ground Squirrel. 1975. Factsheet.
FS 606-3	Overwinter Storage of Herbicides. Revised 1975. Factsheet
1720	The Farm Home Planning Process - (fold-out brochure). 1975.
1121-65	Food Hints for Camping and Backpacking - (fold-out brochure). 1975.
323	Labor Management in Agriculture. 1975. 31 p.

FS 120/52-1	Silage in Alberta. 1975. Factsheet.
1870	Registered Retirement Savings Plans and Registered Home Ownership Plans. Revised 1975. 16 p.

AGRICULTURE CANADA

724-2	Farm Pasture Fencing. Publication No. 1568. 1975. 31 p.
406/34	The Registration of Animals in Canada. Publication No. 1557. 1975. 14 p.
1147-1	Come on into the Metric Kitchen. Publication 1564. 1975. 7 p.
1131-30	Cereals Anytime. Publication No. 1551. 1975. 15 p.
420/723	Farm and Ranch Equipment for Beef Cattle. Publication No. 1390. Revised 1975. 37 p.
142/20-1	Growing and Using Fababeans. Publication No. 1540. 1975. 21 p.
475/20-1	Mink Management and Nutrition. Publication No. 1566. 1975. 10 p.
258/20	Growing Rutabagas. Publication No. 1355. 1975. 6 p.
200/47	Judging Standards for Horticultural Shows. Publication 1395. Revised 1975. 47 p.
257/20-1	Growing Garden Tomatoes. Publication 1558. 1975. 16 p.
161/20-1	Growing Garden Potatoes. Publication 1559. 1975. 15 p.
1131-13	Beans, Peas and Lentils. Publication 1555. 1975. 14 p.
1151	Canning Canadian Fruits and Vegetables. Publication 1560. 1975. 29 p.
1132-14	Tender Ways With Beef - (fold-out brochure). Publication 1519. Revised 1975.
745-1	Combines Operation and Adjustment. Publication 1464. Revised 1975. 34 p.
1122-60-2	Salads. Publication 1539. 1975. 24 p.

1122	Easy on the Budget Main Dishes & Desserts. Publication 1549. 1975. 22 p.
005-1	Farming in Canada. Publication 1296. Revised 1975. 64 p.
071	Climate of the Mackenzie Plain. Publication 1554. 1975. 27 p.
285/21	Geraniums. Publication 1411. Revised 1975. 4 p.
616	Beekeeping in Western Canada. Publication 1542. 1975. 15 p.
663-1	Brucellosis - (fold-out brochure). Publication 1552. 1975.

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AGRI-NEWS

CANADIANA

February 1, 1976

FOR IMMEDIATE RELEASE

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Phone (403) 427-2127

Alberta
AGRICULTURE
COMMUNICATIONS

February 1, 1976

FOR IMMEDIATE RELEASE

RAPESEED SITUATION AND OUTLOOK

Price prospects for rapeseed are considerably more favorable than they were in early 1975, despite the fact that prices themselves are considerably less favorable than they were a year ago.

According to Alberta Agriculture's marketing analyst, David Walker, it is reasonable to believe that the rapeseed market has 'bottomed out' with respect to prices. "This", he says, "is not to suggest that prices in 1976 will average more than they did in 1975, but rather that we will see a slow improvement in prices during the year."

Rapeseed is only one of many global sources of vegetable oils and protein meals which compete for use as margarine, shortening and salad oil as well as for use as a feed supplement for a wide range of livestock. Canadian rapeseed prices generally reflect prices for competing oilseeds on international markets, which, in turn, are determined by the balance between production and consumption on a global scale.

The 1975 global oilseed production increased by about 13 per cent compared with 1974 production and reached a new record level. Consumption, on the other hand, increased only marginally during this period. High prices and recessionary economic conditions dampened demand for both oils and meals.

"A continuing expansion of 'output' from Asia and Brazil will maintain world supplies at high levels for some months to come", Mr. Walker says, "and it is expected that world stocks will be at potentially excessive levels by this summer. In fact, beginning stocks for the 1976 crop year are likely to approach the 18 million tonne level, thereby considerably exceeding any previous pre-harvest stock supply."

The developing situation for 1976 appears somewhat of a reversal of the 1975 situation. "With the present improvement in economic conditions, we can expect both demand and consumption to

- (cont'd) -

continue to expand in 1976-77", Mr. Walker says. However, 1976 production prospects are for a crop that is not any larger than that of 1975, and the chances of weather conditions around the world being as favorable for oilseed production as they were in 1975 are not great. More importantly, oilseed crop prices relative to those for other grains are not favorable with the result that a reduction in oilseed acreages can be expected when these crops compete with grains for seeded acreage."

The January intentions to plant report for 1976 soybean production suggests that the U.S. soybean acreage will be down 6.7 per cent from last year as a result of a general land switch to corn and cotton production.

Mr. Walker believes that the combination of improved consumption prospects and reduced production is likely to result in the supply/consumption gap narrowing between the summer of 1976 and the summer of 1977 — a realistic basis for expecting improved oilseed prices.

The Canadian rapeseed situation is similar to the aggregate global oilseed situation. Statistics Canada estimates 1975 Canadian rapeseed production at 72.1 million bushels, which is 40.5 per cent above the 1974 level. This increased 'output' resulted mainly from a larger acreage and to a lesser extent from increased yields.

Prospects for export and domestic use of the 1975 rapeseed crop are for better sales than was the case during the 1974-75 crop year. Exports of 14.4 million bushels to mid-January of this year are a third higher than for the same period a year ago. Mr. Walker projects exports for the total crop year to be about 31 million bushels with the major share going to Japan. "Japanese buying appears to be setting the pace for Canadian rapeseed prices", he says. During the four-month period between August and November 1975, Japan took 87 per cent of all Canadian rapeseed exports. This figure compares with 76 per cent for a similar period in 1974.

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Rapeseed Situation and Outlook

This summer's rapeseed carryover is projected to be in the region of 30 million bushels, compared with a carryover of 43 million bushels following the record 1971 crop year. This projected carryover is probably equivalent to twice minimal requirements and can be considered an adequate amount. Whether it is more than adequate will depend upon production and consumption prospects between now and the summer.

Mr. Walker believes that protein meal values are likely to recover more rapidly than those for vegetable oils. Hence, the recovery of rapeseed prices may be less marked than those for soybeans.

A comparison of prices in November 1974 with those in 1975 show that the value of the oil in rapeseed was the main cause for the decline in prices. U.S soybean oil was trading at 41¢ a pound in mid-November 1974, while in mid-November 1975 it was trading at less than 20¢ a pound. "This difference in value", Mr. Walker explains, "is worth $4 a bushel for rapeseed." On the other hand, a decline in soy meal from about $145 to $115 is worth less than 40¢ per bushel for rapeseed. While soy meal prices are likely to recover all the ground, and more, that they lost between November 1974 and November 1975, oil prices most certainly will not.

"Assuming average yields and the absence of other unforeseen developments, it might be reasonable to expect rapeseed prices to improve by $1.50 per bushel or better by the time the 1976 crop is harvested." The value of meal will probably account for at least half of this increased value.

The rate at which rapeseed prices increase, and the levels above $6.50 which they attain will depend upon the rate and extent of economic recovery, and the point in time when it becomes apparent that the 1976 global oilseed crop will not exceed that of 1975.

February 1, 1976

FOR IMMEDIATE RELEASE

LIQUID WHEY COULD REPLACE PROTEIN SUPPLEMENT

Results of a study carried out by Alberta Agriculture shows that whey can be used to replace a protein supplement in growing-finishing pig rations. Whey is a by-product of cheese.

The study had two objectives: to evaluate the results of feeding whey to growing finishing pigs under commercial conditions and to evaluate three different systems of feeding it -- through nipples, water bowls and a 6" diameter PVC pipe in which 5½" holes had been cut in the upper front portion. The pipe was mounted on the outside walls of the pens, 8" above the slats.

Two hundred and fifty-six pigs (barrows and gilts) with an average weight of 105 pounds were used in the experiment, which took place on a farm in southern Alberta. Each combination of treatments were duplicated,and there were 16 pigs to each pen.

The following table shows the allotment of pigs by the treatments they received, i.e. the rations they were fed and the system by which they received liquid whey or water.

TREATMENT NUMBER	NUMBER OF PIGS	TREATMENT		
		MEAL	LIQUID SYSTEM	
1	32	Barley+ Mineral+ Vitamins	Liquid Whey	Nipples
2	32	Complete Feed	Liquid Whey	Nipples
3	32	Barley + Mineral+ Vitamins	Liquid Whey	Bowls
4	32	Complete Feed	Liquid Whey	Bowls
5	32	Barley+ Mineral+ Vitamins	Liquid Whey	Pipe
6	32	Complete Feed	Liquid Whey	Pipe
7	32	Complete Feed	Water	Nipples
8	32	Complete Feed	Water	Bowls

- (cont'd) -

Liquid Whey Could Replace Protein Supplement (cont'd)

As can be seen from the above table the pigs in treatment 5 received only barley and a mineral and vitamin premix, while the pigs in treatment 6 received complete feed. Both groups were fed liquid whey through the pipe. The pigs in treatment one were fed barley and a mineral and vitamin premix, while the pigs in treatment 2 were fed a complete feed. Both groups received liquid whey through the nipples.

The pigs which received treatment 5 and 6 both had an average daily gain of 1.60 pounds, which was the highest gain recorded in the experiment. Treatments one and 2 showed the lowest average daily gains. There was no difference in the backfat depth in pigs from any of the treatments and the loin eye areas were all comparable.

From the results of treatment 5 it is clear that whey can be substituted for a protein supplement in growing-finishing rations without any loss of gain. Approximately $5 worth of protein supplement was saved per pig during the growing-finishing period when the pigs received a sufficient quantity of whey to take the place of a protein supplement.

Experimental results also showed that the pipe method was the most efficient way of feeding whey. Although the intake of liquid whey could not be recorded, it was observed that pigs fed liquid whey by the nipple system (treatments one and 2) wasted more whey during each feeding than pigs on the bowl system, which, in turn, wasted more whey than pigs on the pipe system (treatments 5 and 6). Another advantage of the pipe system was that more pigs had access to the whey at any one time (an average of 5 drinking holes per pen).

In Alberta Agriculture's experiment the whey was pumped from a 4,500-gallon corrosion-treated concrete cystern located below the boiler room to prevent the whey from freezing during the winter. The pump was a submersible model with level controls for safety. A return 1¼" pipe to the system was installed with a manual valve and pressure gauge. Pressure was maintained at 4 to 5 psi. All the main supply lines were made of 1" polyethylene pipe and the lateral lines were plastic with galvanized steel drop pipes.

- (cont'd) -

Liquid Whey Could Replace Protein Supplement (cont'd)

A considerably cheaper means of transporting whey from the tank to the pens could be accomplished by using a gravity flow pipe system controlled by a float valve instead of the submersible pump system.

Detailed information on feeding and handling whey can be obtained from the Pork Industry Branch and the Engineering and Home Design Branch, Alberta Agriculture, Agriculture Building, 9718 107 Street, Edmonton, Alberta, T5K 2C8.

February 1, 1976

FOR IMMEDIATE RELEASE

BLUETONGUE IN SHEEP

Although there has been a great deal of discussion in recent weeks about new bluetongue test requirements for cattle coming into Canada from the United States, Canadians generally know very little about this disease. To date it has never been diagnosed in this country.

Alberta Agriculture's director of veterinary services, Dr. H.N. Vance, says that bluetongue is primarily a disease of sheep, but that the virus which causes it can be harbored in cattle. The virus occasionally produces the disease in cattle.

Bluetongue is transmitted by sand flies, and possibly mosquitoes and sheep keds. The seasonal peak of infection occurs in late summer and early fall.

Once infected, the animal develops fever, inflammation of the mouth and nose membranes, which is accompanied by a discharge, and swelling of the lips and tongue. There is also inflammation in the skin and feet, the latter causing lameness.

According to Dr. Vance, the death rate from bluetongue is often not high in sheep. The main loss is caused by a marked deterioration in the condition of the animal, its long recovery period and the damaged fleece.

Bluetongue, originally reported from Africa, has now been diagnosed in many parts of the world, including several states in the U. S. However, there are still several countries of the world, among them Australia and New Zealand, which, like Canada, are still free of the disease. "The countries that are still free are being very careful about importing animals which might be a source of the bluetongue virus", Dr. Vance says.

Recognition of bluetongue in cattle is more recent than in sheep, and it generally takes a milder form in cattle than it does in sheep.

February 1, 1976

FOR IMMEDIATE RELEASE

CORN HYBRIDS

Do you grow corn for silage? If so you have many hybrids to choose from, according to Dr. M.D. MacDonald of the federal research station at Lethbridge.

He says in a normal season the later-maturing hybrids generally outyield the earlier ones, but that late hybrids are likely to be very immature in late September (when most farmers start cutting corn for silage) in a cool season or in a season with an early frost.

Silage hybrids should mature early enough to have well-dented kernels and not more than 75 per cent plant moisture when silage harvesting starts. "Corn of this maturity can be obtained in most years in the Bow Island-Medicine Hat area", Dr. MacDonald says.

However, in other areas of southern Alberta, corn of that quality may be obtained only by growing the earlier-maturing hybrids. Dr. MacDonald suggests that corn growers who want silage corn with well dented kernels or who farm in the 2100 to 2000 heat unit area choose one of the recommended grain hybrids for silage. They will yield less total dry matter per acre than the later-maturing hybrids, but should make a better quality silage. Also, a grain hybrid gives the grower a choice of cutting it for silage or at leaving it to be harvested for grain.

Dr. MacDonald reports that there are only four grain hybrids recommended for Alberta. They are Stewart 2300, Warwick TX17, Pride R102 and Asgrow RX18. In areas with more than 2400 heat units early-maturing hybrids recommended for silage production can be harvested for grain

Fred Mehlhaff, Alberta Agriculture's fieldman on the Alberta Corn Committee, reports that farmers who have been growing corn for the last few years have now improved their cultural practices to the point where they can produce the same amount of corn on a 10 to 15 per cent smaller acreage than was the case when they started in to corn production.

- (cont'd) -

Corn Hybrids (cont'd)

Recommended corn hybrids and seed-corn dealers are listed in the 1976 "Alberta Corn Committee Guide to Corn Production in Alberta", which also contains a heat unit map. It can be obtained from the federal research station at Lethbridge or from district agriculturists.

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February 1, 1976

FOR IMMEDIATE RELEASE

A MARKET FOR PROPOLIS

Are you aware that there is a good market for propolis, the resinous sap collected by bees from trees and used to seal off cracks and to secure honey frames in their hives.

A market for propolis has developed recently as a result of the many medical uses that have been found for this product. They range all the way from dental and ophthalmic anaesthetics to treatments for bronchial infections and gastric ulcers.

According to information received by Dr. Ulf Soehngen, Alberta Agriculture's supervisor of apiculture, a Mr. R. van den Boogaart of West Germany has been buying propolis in that country for over three years and is now interested in buying it from Canadian beekeepers. Mr. van den Boogaart says he has been paying an average price of about $100 a kilo (2.2 pounds), and that the price for top quality propolis is about 30 per cent higher.

Sometimes it is not easy to differentiate between propolis and wax. In the summer propolis can be easily pulled apart like chewing gum as opposed to wax which breaks much more quickly. When propolis has ripened in the fall it is not sticky and often shines as opposed to wax which is dull. "In case of doubt," says Mr. van den Boogaart, "one can chew propolis between the front teeth. After 10 to 20 minutes one should feel a bit numb. If wax is chewed, this is not the case." In really cold weather propolis literally 'springs' off the wood.

Because propolis is used for human medical purposes, great care must be taken to harvest it in as pure a state as possible. Here is how Mr. van den Boogaart recommends doing it.

"It is best taken off," he says, "with a blunt knife." If you use a sharp blade you will usually get a lot of wood splinters and other contaminants like flakes of paint. Paint contamination will make it unusable.

Propolis is usually found on the frames, between the frames and the hive wall, on the queen excluder, at the hive entrance and any other place that the bees found it necessary to seal over.

(cont'd)

A Market for Propolis (cont'd)

"It pays," says Mr. van den Boogaart, "to store propolis and wax in two different boxes. The best place to keep it is either in a refrigerator or in a deep freeze."

For the final cleaning, he recommends putting about half a pound of propolis at a time on a newspaper or white sheet. Then, with a pair of tweezers take out any pieces of foreign matter like pieces of wax, splinters of wood and pieces of dead bees.

Anybody who would like to sell his propolis should send a one-pound sample for analysis to Mr. R. van den Boogaart, 8731 Premich/Rhön, Waldstrabe 5, West Germany. The sample should be dry and sent in small pieces because big lumps are hard to process. Mr. van den Boogaart is evidentally prepared to pay for all samples.

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February 1, 1976

FOR IMMEDIATE RELEASE

BEEKEEPING PUBLICATIONS

In response to a number of requests from beekeepers and prospective beekeepers for information on beekeeping, Alberta Agriculture's supervisor of apiculture, Dr. Ulf Soehngen recommends the following:

"The Hive and the Honey Bee", edited by R.A. Grout and published by Dadant and Sons Inc., Hamilton, Illinois, U.S.A., gives a very good account of most aspects of beekeeping in North America. It can be obtained from the Alberta Honey Producers' Co-operative Ltd., 16650-111 Avenue, Edmonton or directly from the publisher. It costs less than $10.

"American Bee Journal", published by Dadant and Sons Inc., Hamilton, Illinois, U.S.A., deals mainly with beekeeping in the United States. However, it occasionally includes material about beekeeping in other countries. A subscription costs $5.25 a year.

"Gleanings", published by A.I. Root Co., Medina, Ohio, U.S.A., covers a wide range of beekeeping topics in the United States and other countries. A subscription costs $5.25 a year.

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February 1, 1976

FOR IMMEDIATE RELEASE

FAMILY FINANCE RECORD BOOK

Did you know that less than three out of 10 husbands leave a will -- that one out of four widows never receive all of the financial benefits coming to them because they are unaware that they exist -- that many small insurance policies ($1,000 to $5,000 range) go unclaimed because the husband did not inform his wife that he had them or because they got lost?

To avoid becoming a victim of one of these situations get a free copy now of Alberta Agriculture's "Family Finance Record Book", prepared by home management specialist, Patricia Mascaluk.

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February 1, 1976

FOR IMMEDIATE RELEASE

INTERNATIONAL DEVELOPMENT COORDINATOR APPOINTED

Mel A. Cameron, director of Alberta Agriculture's market intelligence division, has announced the appointment of Thomas Rackham as international development coordinator

In this position, Mr. Rackham will act as department consultant in matters concerning overseas development projects that provide opportunities for exporting Alberta's agricultural technology, resources, services and commodities. He will also develop an inventory of agricultural expertise in Alberta that can be drawn on by agencies requiring specialized skills, and he will evaluate projects proposed as joint ventures to Alberta firms and investors.

Originally from the Lloydminster area, Mr. Rackham has a B.Sc. from the University of Saskatchewan and a M.Sc. from Montana State College. His professional experience includes posts on the faculties of several colleges, and work in international development projects in Africa, Europe, South America, and the Middle and Far East. Some of these projects were carried out for the governments of various countries, while others were undertaken on behalf of Canadian and United Nations organizations.

Mr. Rackham joined Alberta Agriculture in 1968 as head of the market analysis branch, a position he has held until his present appointment.

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February 1, 1976

FOR IMMEDIATE RELEASE

MARKET ANALYSIS BRANCH HEAD APPOINTED

Jim Dawson has been appointed head of the market analysis branch of Alberta Agriculture's market intelligence division.

In making the announcement, Mel Cameron, director of the division, says that Mr. Dawson will be responsible for implementing programs to provide farmers and agri-business with market outlook and analytical information; information on market structure and processes and similar economic intelligence that will help them to make better decisions. The market analysis branch also includes a business analysis unit which offers consulting services to agri-business.

Mr. Dawson, raised on a farm in southern Alberta, received a B.Sc. (agricultural economics) from Utah State University in 1969, and a M.Sc. (agricultural economics) from the University of Alberta in 1970. From March 1971 until September 1972 he was employed by the marketing and trade division of Agriculture Canada. In 1972 he joined the market analysis branch of Alberta Agriculture, where he remained until his present appointment.

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February 1, 1976

FOR IMMEDIATE RELEASE

FARM BUSINESS MANAGEMENT BRANCH APPOINTMENT

The head of Alberta Agriculture's farm business management branch has announced the appointment of Keith Brown to the farm planning section.

Mr. Brown's duties will include preparing planning materials designed to help Alberta farmers with their cropping and machinery decisions.

He is a native of New South Wales, Australia, and attended the University of New England. He graduated in 1971 with a bachelor of agricultural economics degree, having majored in farm management and agricultural economics.

Following graduation Mr. Brown spent three years as a field crop technical advisor and grain buyer with Meggitt Ltd., Australia's pioneer and largest oilseed crushing company. During this period he became familiar with many of the cropping and livestock systems used in both dryland and irrigation farming in Australia.

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February 1, 1976

FOR IMMEDIATE RELEASE

DISTRICT AGRICULTURIST APPOINTMENTS

The director of Alberta Agriculture's extension division, John Calpas, has announced the appointments of Tom Guidinger to the position of assistant district agriculturist at Drumheller, and Marvin Nakonechny to the position of district agriculturist at Wetaskiwin. Mr. Nakonechny replaces Garth Davis and Mr. Guidinger replaces Ted Ford who served the Drumheller district as farm management technician.

Prior to accepting the above position with Alberta Agriculture, Mr. Guidinger served with C.U.S.O. for two years in Guyana as an agriculture assistant. Following his return to Canada, he was employed as an instructor by Canada Manpower in Saskatchewan and as an instructor for adult education courses conducted by the Saskatchewan Department of Education.

Mr. Guidinger was born and raised in Eatonia, Saskatchewan. He attended the University of Manitoba and obtained a B.Sc. (agriculture) in 1968, having majored in animal science.

Mr. Nakonechny, a native of Alberta, attended the University of Alberta where he obtained a B.Sc. in 1972 and a B.Sc. (agriculture) in 1974. He joined Alberta Agriculture the same year as an assistant district agriculturist at Ryley.

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AGRI-NEWS

CANADIANA

February 9, 1976

FOR IMMEDIATE RELEASE

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FOR IMMEDIATE RELEASE

TESTING PLOWS IN SOLONETZIC SOILS

A three-layer plow breaking up solonetzic soil in the Prairie Agricultural Machinery Institute's test plots near Stettler.

A three-layer plow removing top soil and replacing it after breaking up the hardpan.

- (cont'd) -

Testing Plows in Solonetzic Soils (cont'd)

The Prairie Agricultural Machinery Institute's Alberta station at Lethbridge has completed testing of several deep plow models in solonetzic soils in the Stettler-Donalda area.

The tests were carried out in co-operation with Alberta Agriculture's soils branch which is doing extensive plot work to determine the effectiveness of deep plowing. Although results look promising, conclusive data will not be available until several crops have been harvested from the test plots.

Solonetzic soils, which are caused by sodium salts, have an impermeable hardpan layer under the top soil. By inhibiting moisture movement and root penetration, this hardpan causes poor crop yields.

Soil scientists feel that up to 10 per cent of Alberta's 10 million acres of solonetzic soils may have potential for improved production through deep plowing. Deep plowing breaks up the impermeable hardpan layer and mixes the calcium in the sub-soil with the sodium rich top soil and hardpan which allows water to pass through the soil and remove the sodium.

The plows being tested at Lethbridge are experimental models that are capable of plowing to a depth of three feet. One of the plows slices the soil in three layers, each at a different depth, and mixes the soil layers while keeping the top soil near the surface. It was designed by John Kienholz of Alberta Agriculture's engineering branch, and manufactured by Kellough Brothers of Stettler.

Ed Wiens, engineer-in-charge of the Prairie Agricultural Machinery Institute's Alberta station, indicated that although large four-wheel-drive tractors have enough power to pull these plows at these depths, traction could present a serious problem. He reports that an average 13,500 pounds of pull was measured when the three-layer plow was plowing at a depth of 24 inches.

Construction and testing of the three-layer plow has been funded by Agriculture Canada through the Research, Development and Evaluation in Agriculture Mechanization Program. The test van used for draft and slippage measurements was leased from the University of Saskatchewan's control engineering division.

February 9, 1976

FOR IMMEDIATE RELEASE

LEPTOSPIROSIS APPEARS IN ALBERTA

Leptospirosis, a well known disease in most parts of Canada and the United States, now appears to be gaining a foothold in Alberta.

Dr. H.N. Vance, director of Alberta Agriculture's veterinary services division, reports that leptospirosis affects cattle, swine and many wild animals. In cattle and swine it usually causes abortions in animals that may otherwise appear normal. However, mastitis accompanied by blood-tinged milk, is another sign.

"One of the reasons that it is important that this disease be recognized", says Dr. Vance, "is that it also affects human beings. In people the disease, known as Weil's Disease, causes a type of jaundice."

Dr. Vance strongly recommends that livestock producers who import cattle or swine from other provinces in Canada or from the United States have them blood tested before bringing them into Alberta. Although leptospirosis is still uncommon in this province, it is now a common disease in both British Columbia and Ontario.

Dr. Vance also recommends that livestock producers have aborted fetuses and fetal membranes examined for leptospirosis, brucellosis and other diseases at one of the provincial veterinary laboratories. You can take them to your local veterinarian or send them directly to the provincial veterinary laboratories in Edmonton, Lethbridge or Fairview.

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February 9, 1976

FOR IMMEDIATE RELEASE

MAGNETICALLY TREATED SEED VERSUS NON--TREATED SEED

The controversy over the advantages of magnetically treated seed versus non-treated seed still continues. However, tests conducted by the federal research station at Swift Current, Saskatchewan, seem to negate widely publicized claims that seed which has been passed through a magnetic field emerges earlier, matures faster and yields higher than non-treated seed.

According to a release received from Swift Current by Alberta Agriculture, the tests were conducted in farmers' fields, comprising various soil types, in south-western Saskatchewan. They were carried out in 1974 at seven locations and in 1975 at nine locations.

The grains tested were Neepawa wheat, Wascana durum, Conquest barley and Sioux oats. The seed from each crop was divided into two portions. One portion was passed through a commercial magnetizer and the other was not.

The seed from each portion was sown in small adjacent plots at each location. The plots were observed shortly after the seed emerged and at regular intervals throughout the growing season. At the time of maturity the plots were harvested and the yields measured.

"At no time", says the release, "was there a marked difference at any location between the magnetized and the non-magnetized seed plot for any of the four grain crops. At some locations small differences could be observed between some of the adjacent plots".

The release also points out that the effect of magnetic treatment on yield was very inconsistent, and that none of the locations showed a consistent yield advantage or disadvantage for treated seed. This can be seen in the following table, which also shows the average yield increase or decrease for each crop.

- (cont'd) -

Magnetically Treated Seed Versus Non-treated Seed (cont'd)

Increases in Yield from Magnetized Seed — lbs/acre

(- indicates a decrease in yield)

	1974 (7 sites)			1975 (9 sites)		
	Maximum	Minimum	Average	Maximum	Minimum	Average
Wheat	52	-305	-65	128	-165	13
Durum	172	- 45	60	168	-153	- 5
Barley	107	-157	-19	149	- 50	35
Oats	196	-125	34	165	- 23	58

A test conducted at Swift Current in 1975 to determine the effect of different seed sources and different magnetic seed treaters showed no distinct difference in plant growth for magnetically treated seed from any of the seed sources or by any of the magnetic seed treaters compared with plant growth from non-treated seed.

Commenting on the release, Larry Gareau of Alberta Agriculture asked the question "Could Southern Saskatchewan's geographic location in relation to the earth's magnetic pole be responsible for these results compared with the more positive results obtained at the federal research station at Lethbridge?"

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February 9, 1976

FOR IMMEDIATE RELEASE

FORWARD–CONTRACTING HOGS FOR EXPORT

Perhaps one of the most frustrating aspects of farming is its uncertainty. Periodic, widely fluctuating commodity market prices and variations in production costs and levels all create considerable uncertainty and instability in a farmer's income. This is where forward-contracting can be useful for hog producers.

Why Forward Contract?

The main objectives of the Alberta Hog Producers' Marketing Board's forward-contracting of hogs for off-shore markets is to reduce the uncertainties that presently exist in the traditional hog production cycle and to develop alternative markets for Alberta farmers.

Through forward-contracting the producer stabilizes his margin over feed costs for that portion of his production that is committed to export. This is achieved through an on-going price adjustment which is calculated by a 'flexibility' formula. This formula passes the largest and most uncertain part of a hog producer's costs (mainly grain and supplement) to the buyer. The buyer accepts this price uncertainly in exchange for an assured, continuous supply of meat under a long-term commitment. The contract period attempts to cover a complete hog cycle which averages three years.

Contract

Under this export system the hog producer and the buyer sign a binding contract committing the producer to deliver a specific number of hogs for the duration of the agreement. The producer may decide to sign a three-year contract to produce and deliver for export 10 to 15 per cent of the hogs that he markets each month. Many Alberta hog producers are committing between 15 and 25 per cent of their monthly marketings for export, but it is important to avoid committing more hogs than you are sure you can supply.

- (cont'd) -

Forward-Contracting Hogs for Export (cont'd)

How is the Contract Price Determined?

The carcass selling price, based on a hot dressed carcass weight, is established on the successful completion of contract negotiations. At this point, the base price is established for the feed inputs. A four-month moving average of barley and protein prices, omitting the first and last months of the six-month production period, is used to adjust the negotiated base settlement price.

For example, if the feed cost component is comprised of 17 bushels of barley and 150 pounds of a 40 per cent commercial protein supplement, and the total feed consumption is 966 pounds per hog yielding a 160-pound carcass, a 10¢ charge per bushel in barley would result in a settlement price change of about $1.06 per hundredweight.

In another example, the price of barley might be $2.50 a bushel and a 40 per cent protein supplement might cost $11 a hundredweight. The contract settlement price here would be $63.38. On the other hand, if barley was only $2 a bushel and the cost of protein supplement was $10 a hundredweight, the contract settlement price would be $57.13.

Although all export hogs are priced f.o.b. hog board terminal, producers may deliver their hogs directly to a packing plant when this is more convenient. The terminals are located at Grande Prairie, Vermilion, Edmonton, Red Deer, Calgary and Lethbridge. Regardless of the terminal used, the settlement price is the same.

The Alberta Hog Producers' Marketing Board's present export target is 12,000 hogs per month. This volume represents approximately 8 to 12 per cent of Alberta's current total hog production.

Forward-contracting can be very useful for planning hog production, making decisions and adding income stability to your operation. However, Alberta Agriculture officials recommend that you make sure you know and understand what your responsibilities are before you enter into a forward-contract.

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February 9, 1976

FOR IMMEDIATE RELEASE

FARM MACHINERY AVAILABILITY AND PRICE OUTLOOK

Most farm machinery is expected to be more readily available in 1976 than it was in 1975, but supplies of large equipment like tractors of 80 horsepower or more are likely to remain tight throughout most of the year.

Commenting on the federal Agricultural Outlook Conference, Alberta Agriculture's Statistician, Church Sterling, says the overall demand for farm machinery is expected to be lower than it was in 1975, with the result that farm equipment inventories will be rebuilt to more normal levels. However, the recent trend towards bigger tractors is expected to continue.

This prognosis agrees with the Canadian Farm and Industrial Equipment Institute's forecast of farm machinery sales for 1976.

The two factors that are expected to have a dampening effect on the overall retail demand for farm machinery in Alberta, and in Canada as a whole, this year are the expected lower realized farm incomes, and the fact that farmers took advantage of higher incomes from 1972 to 1974 to replace old machinery.

In spite of the anticipated decreased demand for farm machinery in 1976, prices are expected to be somewhat higher this year than last year. However, price adjustments may not be as frequent or as large as they were in 1975.

U. S. price increases during 1976 are expected to be up about 10 per cent compared with 1975 price levels.

- (cont'd) -

Alberta

Farm Machinery Availability and Price Outlook (cont'd)

Farm machinery expenses for Alberta farmers are the largest single component of total farm operating expenses, accounting for between a fifth and a quarter of total expenses, over the last 20 years. At the present time farm machinery operating and depreciation expenses in Alberta are over $1.3 billion a year.

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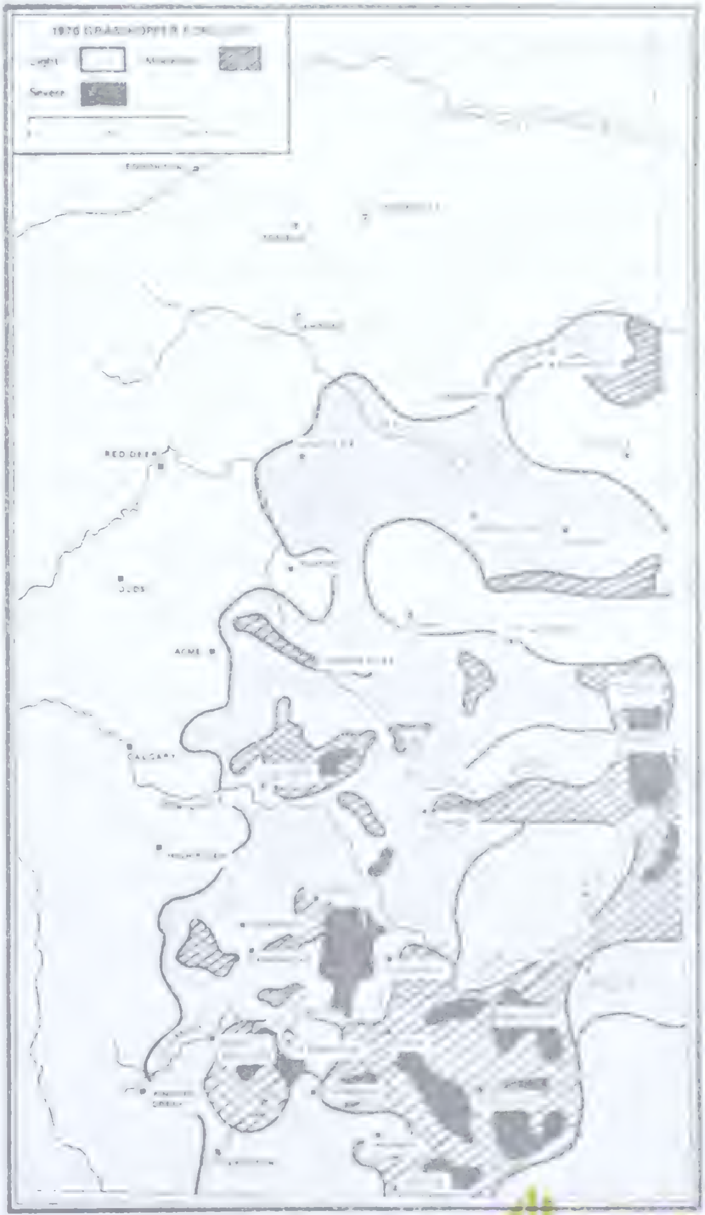
February 9, 1976

FOR IMMEDIATE RELEASE

1976 GRASSHOPPER FORECAST

The 1976 Alberta Grasshopper Forecast, published by the federal research station at Lethbridge, predicts an area of infestation of about the same as last year, but the area of severe infestation is expected to be down.



Light and moderate infestations are forecast to be about 10 and five million acres respectively, unchanged from last year. The area of severe infestation is expected to be about 1 million acres, which is about half that predicted for last year. Predicted severe infestations are scattered throughout southern Alberta and extend as far north as Wainwright.

The head of Alberta Agriculture's pest control branch, Joe Gurba, says that if the spring is warm and dry, this year's infestation could be more severe than infestations have been in the past few years, despite the fact that the predicted severely infested area is down. He points out that the grasshopper outbreak was held back during the last three years by cool, wet weather in June. With the hatch being

- (cont'd)

spread over about six weeks instead of one week, damage to crops was considerably less than had been expected.

Mr. Gurba reports that dimethoate, the insecticide recommended for grasshopper control, will again be available from municipal offices in predicted areas of infestation.

Alberta Agriculture's 1976 colored grasshopper forecast maps will be available from municipal and district agriculturists' offices and grain elevator agents about the middle of February.

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February 9, 1976

FOR IMMEDIATE RELEASE

A LEGUME WITH A GREAT PASTURE POTENTIAL

Are prairie farmers overlooking the potential advantages of sainfoin, a relatively new legume crop?

Alberta Agriculture's forage crops specialist, Larry Gareau, thinks they are. He believes that this bloat-free legume has a tremendous potential as pasture, particularly in view of the fact that our natural grazing resources are almost exhausted.

"Although sainfoin has proved hard to establish and has been shorter lived than alfalfa on the grey wooded soils in northern Alberta, it has done extremely well on black and brown soils throughout the province," Mr. Gareau says.

"In those cases where farmers have grown sainfoin for seed production, yields of over 1,000 pounds per acre have been recorded,and the seed has had a protein content of up to 35 per cent. This high level of high quality legume protein means that sainfoin seed could be used to replace peas or soybeans as a protein supplement," says Mr. Gareau, "and the straw could be fed as a high quality roughage."

An Agricutlure Canada report states that research scientists at Lethbridge believe sainfoin is an excellent alternative to other forage legumes for both pasture and hay, despite a few disadvantages.

The disadvantages are that in prairie trials sainfoin yielded about 10 per cent less hay per acre than alfalfa, that sainfoin plants recovered more slowly than alfalfa after being cut and that sainfoin stands remained productive for only four or five years. Sainfoin has also been found to be lower in protein content than alfalfa at similar stages of growth.

However, on the positive side, sainfoin does not drop its lower leaves as alfalfa does,and its stems remain succulent as the plant matures. According to the Agriculture Canada scientists,a study carried out in England showed that sainfoin stems were 27 per cent more digestible than those of alfalfa.

Other advantages of sainfoin over alfalfa include the fact that harvesting can be delayed longer without undue loss of hay quality (stage of maturity has less influence on sainfoin's nutritive value), it is higher in nitrogen-free extracts than alfalfa at the same stage of maturity, as well as in total digestible nutrients, and it is lower in crude fibre content.

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February 9, 1976

FOR IMMEDIATE RELEASE

BREEDING GOATS FOR MEAT

Breeding goats for the meat trade is an aspect of goat husbandry which has been largely overlooked in Canada.

According to Alberta Agriculture's livestock specialist, Dr. John Taylor, this type of operation would be suitable for farmers who want to raise goats to provide an alternative or an additional source of income to that obtained from their other enterprises. Goats for this type of operation would not have to be top quality breeding animals, but could be drawn from suitable cull-type animals.

Large herds of dairy goats always produce a certain number of surplus kids and a percentage of uneconomical does. Many of the animals regarded as unproductive in terms of commercial milk yield are 'beefier' than the true dairy animal and produce enough milk to raise their own kids.

Conceivably such animals and the dual purpose Nubian-Saanen crossbreds could form the basis of a meat-type breeding herd. Their conformation, combined with the high early weight gains which are characteristic of some types, plus the high protein, non-fat flesh indicates that such an industry would be feasible.

Goats raised as meat animals require much less intensive husbandry than dairy goats. In fact, they are much the same as beef cattle and sheep except that they can be grazed on a much lower grade pasture and even on scrubland. Another advantage of goats is that they tend to be more fertile than either cattle or sheep. It is not uncommon for goats to successfully raise two or more kids per mating. Probably the only disadvantage of goats compared with cattle and sheep is that the goats require better, and, therefore, more expensive fencing.

- (cont'd) -

Breeding Goats for Meat (cont'd)

One of the main difficulties involved in creating a market for goat meat seems to be gaining public acceptance of the meat. However, even at the present time, most provinces in Canada have ethnic groups which require goat meat to celebrate specific occasions. In Alberta, for example, the Italians require six-week old kids to celebrate Easter. The Greeks like them eight weeks old, while other groups will take them older than eight weeks.

In Australia some enterprising individuals have had some success in exporting the carcasses of wild goats to various Asian and Pacific countries. Japan, in particular, imports large quantities of goat meat.

It seems that a well organized education program aimed at promoting the advantages of goat meat over other types of meat could, undoubtedly, create a market for goat meat in Canada. Goat's meat is a sweet, versatile, non-fat meat, which, from the point of view of high cholesterol and its associated arterial and heart problems, has a definite advantage over many traditionally eaten meats.

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February 9, 1976

FOR IMMEDIATE RELEASE

FIDDLEHEADS GROW IN ALBERTA

Have you ever eaten fiddleheads? Do you know what fiddleheads are?

A fiddlehead is a type of fern that grows wild in Alberta's Lesser Slave Lake area. Since it is the first vegetable-type plant to appear in the spring, it has always been in great demand by local residents at the end of a long, cold winter.

Fiddlehead ferns grow in the creekbeds all round Lesser Slave Lake and are very rich in both minerals and vitamins. They can be eaten raw, steamed, baked and fried or in a cheese sauce or ice cream!

When eaten as a green vegetable their flavor is a cross between that of asparagus and broccoli. They remain fresh for at least four or five days after having been picked, and they can be canned or frozen.

Fiddlehead ferns are now being marketed in northern Alberta by Home Grown Products, located at Driftpile. Driftpile is about 200 miles northwest of Edmonton on the south shore of Lesser Slave Lake.

Home Grown Products was recently established by six people who are interested in promoting natural foods. They sell such things as wild teas in tea bags, wild mint, yarrow, rose hips, herbs and vegetable seeds which have been specially adapted to Alberta's northern climate by local amateur plant breeders. Many of the products sold by Home Grown Products are reported to have medicinal properties.

Four of the partners are employed in full time, small-scale farming. A fifth is building up a thriving wooden toy manufacturing business. He makes all the toys himself, while his wife makes a large variety of stuffed toys. All the toys are known as "Fun Farm Toys".

- (cont'd) -

Fiddleheads Grow in Alberta

The sixth partner, Dale Rogers, is in the process of setting up an herbage and a tree nursery. He plans to experiment with various tree varieties that he thinks can be adapted to growing conditions in the northern part of the province.

Dale is a native of Prince Edward Island who came west several years ago. He took his B.Sc. in biology at the University of Alberta and then moved to Driftpile where he has spent the last three years. Being a Maritimer he knows all about fiddlehead ferns because they grow in New Brunswick and are considered a great delicacy in the Maritimes.

In 1975, their first year of operation, Dale and his partners picked about 100 pounds of fiddleheads and marketed them through the High Prairie farmers' market for $1 a pound. So great was the demand that a few minutes after they appeared on the counter, people were being turned away empty-handed.

Dale says "The main production period for fiddlehead ferns is from the beginning of May to the end of May. Yields vary according to environmental conditions, and, for this reason, it is difficult to assess yields in terms of pounds per acre. However, the more you pick them, the more they produce, and they like shady, moist conditions."

This year Home Grown Products hopes to sell their fiddleheads to wholesale and retail outlets in Edmonton. At the present time Alberta imports this delicacy from New Brunswick.

Dale plans to mimeograph a fiddlehead recipe book which will be distributed, at cost, through the High Prairie farmers' market and to anybody else who wants it. He says he is also prepared to provide a pamphlet on the other products sold by Home Grown Products if there is a demand for such information.

The address to write to for the fiddlehead recipes, which will be available in fiddlehead season, is Dale Rogers, Home Grown Products, Driftpile, Alberta.

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February 9, 1976

FOR IMMEDIATE RELEASE

NEW DAIRY SIRE APPRAISAL METHOD

Do you know how the new direct sire comparison method of dairy sire appraisal works? It is one of the topics that will be discussed at a series of dairy herd improvement workshops being held throughout the province by Alberta Agriculture.

Up until now dairy sire production proofs have been based on the productive ability of their daughters compared with all other cows within the herd. It was an easy concept but one that was based upon the assumption that all other cows in the herd represented a fair cross section of available sires. This, however, is not always the case.

In many herds all the cows are daughters of only the best sires available. This means that a young sire that is being performance tested in this type of herd would be assessed only as average when his daughters attained equal status with their stablemates. Because young sires usually establish their production proof from the offspring of matings within a local region, this bias exists in many herds at the same time. The result can be an underestimating (or over-estimating) of their genetic potential.

Alberta Agriculture's supervisor of dairy cattle improvement, A.A. Hughes, explains that the new method of dairy sire appraisal takes into account the genetic differences which develop within regions over a period of time and corrects for this time trend when arriving at a sire's production proof.

In essence, the new sire-proving method will identify the superiority of a sire and give it a statistical measure.

- (cont'd) -

New Dairy Sire Appraisal Method (cont'd)

Following is a list of places and the dates on which the dairy herd improvement workshops will be held:

Athabasca - March 10
Barrhead - March 9
Brooks - March 16
Camrose - TBA *
Cardston - March 18
Evansburg - Feb. 27
Heisler - TBA
Lacombe - TBA
Leduc - Feb. 17
Picture Butte - March 17
Red Deer - TBA
Rocky Mountain House - TBA
Stettler (promotional meeting) - Feb. 26

* To be announced

Contact your district agriculturist for the exact locations of the workshops or for additional information.

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AGRI-NEWS

February 16, 1976

FOR IMMEDIATE RELEASE

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Alberta
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February 16, 1976

FOR IMMEDIATE RELEASE

MEAT INSPECTION IN ALBERTA

All meat processed by Alberta abattoirs that are not under federal jurisdiction will be under compulsory provincial inspection by April 1, 1978.

This statement was made by Dr. H.N. Vance, director of Alberta Agriculture's veterinary services division who was commenting on the Alberta Meat Inspection Act and improvements being made to abattoirs to meet inspection requirements. He pointed out that meat plants with class C licenses will not have their licenses renewed unless they meet the construction and sanitary standards for class A licenses by April 1, 1978.

Alberta's meat inspection legislation has allowed the meat industry five years in which to improve its standards. Three of these five years have now passed and full implementation of the inspection program is expected to be established within the next two years.

"The Alberta Meat Inspection Act", said Dr. Vance, "prohibits the sale of uninspected meat to the public, and the meat industry has been notified that this provision will soon be strictly enforced."

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February 16, 1976

FOR IMMEDIATE RELEASE

NITROGEN SYMPOSIUM RESULTS

Fertilizer, and nitrogen fertilizer in particular, is one of the most popular topics of discussion in farm circles.

What kind should I use? When should I apply it? How is nitrogen lost from the soil? These are the kinds of questions frequently asked by farmers interested in getting the best returns from their fertilizer investment.

Answers to these and many other pertinent questions concerning nitrogen fertilizer use were discussed by scientists from across Western Canada who gathered to present their research findings at the Western Canada Nitrogen Symposium.

Don Laverty, director of Alberta Agriculture's soil and feed testing laboratory, was among those who presented a paper. He says the symposium was one of the most comprehensive and informative conferences on nitrogen that has been held in many years.

The theme, "Towards More Effective Nitrogen Use", caught the interest of people in all areas of the agricultural industry. They included scientists, fertilizer manufacturers and dealers, extension personnel and farmers.

The papers presented at the symposium stressed the importance of nitrogen as a plant nutrient both from the point of view of economical returns and its significance to crop production. It was pointed out that cultivation and cropping have reduced the nitrogen supply power of soils by depleting its organic matter. Organic matter is the main store-house of soil nitrogen, and summerfallowing has frequently been identified as a cultural practice which has accentuated its depletion.

2

- (cont'd) -

Alberta

Nitrogen Symposium Results (cont'd)

Although by avoiding summerfallowing our soils could be safely cropped on a more intensive scale than is presently being done, there would then be a greater requirement for fertilizer nitrogen to maintain or increase production goals, the scientists said.

Measurement of plant available nitrogen in the soil for predicting nitrogen requirements of crops was the topic of another paper. It was stated that we are fortunate in Canada to have a combination of soil and climatic conditions which make it possible to accurately assess soil nitrogen by soil testing. This is not the case in many agricultural production areas. Through the soil testing program in Western Canada, farmers can predict in advance of seeding their nitrogen requirements for specific yield levels. This means they can apply nitrogen fertilizer where it is required and when it is required.

Many symposium participants felt that to make the most efficient use of each pound of nitrogen applied, research efforts should be directed towards the investigation of different methods and times of nitrogen fertilizer application. This suggestion was made in view of the high energy expenditure required to produce nitrogen fertilizer and the increasing cost of this and other inputs.

Emphasis was also placed on the need for continued research into biological nitrogen production through plant - microorganism associations capable of fixing atmospheric nitrogen and converting it into a form which could be used by field crops. It was pointed out that this naturally occurring production of nitrogen offers a means of reducing the expenditure on fertilizer nitrogen.

Research is presently being carried out to determine whether cereal crops, like legumes, have the ability to utilize the vast reserve of nitrogen in the atmosphere. The main factor which limits biological nitrogen production appears to be the high energy requirement of the process as is the case with commercial fertilizer production.

- (cont'd) -

Nitrogen Symposium Results (cont'd)

The final session of the symposium consisted of small group discussions in which additional information was presented and participants voiced their specific concerns. "The exchange of ideas and recommendations which arose from these discussions will, undoubtedly, influence the direction of nitrogen research in Western Canada in the years ahead", Mr. Laverty says.

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February 16, 1976

FOR IMMEDIATE RELEASE

CATTLE WILL BE TREATED AT LIVESTOCK MARKETS FOR WARBLES

All cattle with warble grubs that are sold through Alberta livestock markets this spring will be treated before being released from the market unless they are destined for slaughter. The cost of treatment will be charged to the contributor.

In view of this situation Jack Kerns of Alberta Agriculture's animal industry division strongly advises cattlemen to treat all infected animals this spring. He points out that treatment can be started between the middle of February and the beginning of March, and that it can be done any time up to the middle of June when the grubs stop emerging. Systemic sprays and pour ons and contact rotenone washes can all be used in the spring.

The Life Cycle of the Warble Fly

In April and May warble grubs emerge from the bumps they have formed along the cows' backs and fall to the ground where they enter the pupal stage. After a few weeks they emerge as bee-like flies and lay their eggs in the long hair along the stomach and legs of cattle grazing in the field. These eggs hatch into tiny worms which crawl to the base of the hair and burrow through the skin into the host animal's body. They spend the fall and winter months moving through the body towards the back where they arrive in early spring. Once in this location they cut a breathing hole in the skin and rapidly grow into a thick, fat worm that is about half an inch long. As the worms grow they cause lumps to form which can be easily seen and felt under the hair.

Because warbles spend about two-thirds of their lives in the body of the host animal, this is the place where they can best be eliminated. They are particularly vulnerable from the last half of February to the beginning of June and from September through November. During these periods they can be

- (cont'd) -

Cattle Will be Treated at Livestock Markets for Warbles (cont'd)

destroyed with pesticide systemics which are sprayed or poured on to the host animal and enter its system. It is very important to kill warble grubs before they enter the throat or spinal column, which occurs in Alberta in December and January and during the first part of February. Treatment should be avoided during this period because it can cause allergic side effects in the cattle.

Mr. Kerns says "If fall treatment with systemics was followed by spring inspections and treatment when necessary, it would be a simple matter to eliminate the warble fly in Alberta."

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February 16, 1976

FOR IMMEDIATE RELEASE

SPRINKLER IRRIGATION SHORT COURSE

A three-day short course on agriculture irrigation principles and practices will be held at the Hospitality Inn in Calgary from March 16 18 inclusive. It is being sponsored by the Sprinkler Irrigation Association.

Although primarily oriented towards manufacturers, distributors, dealers, contractors and engineering firms involved in sprinkler irrigation system design and installation, the course is open to anyone interested in sprinkler irrigation. Enrollment is limited to 75 students.

The course will include instructional sessions on resources inventory, applied theory of irrigation scheduling, automation of sprinkler systems, computing systems, application efficiency, hydraulic principles, main line design, lateral line design, power plants and pumps, irrigation sewage disposal projects in Alberta, plant and soil aspects of sewage disposal, applications and regulations on electric power, an economic analysis of systems and a design workshop.

Enrollment fees are $125 per person which includes participation in all course sessions, luncheons on each of the three days, copies of the fourth edition of "Sprinkler Irrigation", "Irrigation Technical Manual -- Engineering Data" and other materials provided by the instructors. Registration fees do not include lodging.

The following people will be instructing in the course:

Jim Boyle, research scientist, Agriculture Canada

Ray Chopiuk, engineer, Calgary Power Ltd.

Fred Clarke, electric protection branch, Alberta Department of Labour

Paul E. Fischback, extension irrigationist, University of Nebraska, Lincoln, Nebraska, U.S.A.

- (cont'd) -

Dave Graveland, soils specialist, Alberta Environment

Richard Griffen, water resources specialist, Utah State University, Logan, Utah, U.S.A.

R.T. Heywood, soil and water specialist, Alberta Agriculture

Hans Korvan, research scientist, Agriculture Canada

Ken Krogman, research scientist, Agriculture Canada

Larry Spiess, irrigation systems engineer, Alberta Agriculture

Tony Van Deurzen, irrigation economist, Alberta Agriculture

Chairing the course and also instructing will be Donald Wentz, irrigation specialist with the conservation and development branch of Alberta Agriculture's irrigation division.

Inquiries regarding participation in the course may be made to the Sprinkler Irrigation Association, 13975 Connecticut Avenue, Silver Spring, Maryland, U.S.A. (telephone 301-871-8188) or to Donald Wentz, conservation and development branch, Alberta Agriculture, Science Building, LCC, Lethbridge, Alberta, T1J 4B3.

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February 16, 1976

FOR IMMEDIATE RELEASE

AGRICULTURAL SERVICE BOARD CONFERENCE

The Agricultural Service Board Conference will be held at the Red Deer Lodge in Red Deer from February 24 - 26 inclusive.

One of the main aims of this year's conference is to enable board members from the different municipalities to share their program experiences and to exchange ideas with personnel doing similar work in other provinces.

The program will include a panel discussion on local government agricultural programs. There will also be discussions on the compatibility of agriculture and the environment and on safety as it relates to agricultural service board work.

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February 16, 1976

FOR IMMEDIATE RELEASE

RESULTS OF EGG BOARD PLEBISCITE

Alberta egg producers have voted to retain the Alberta Egg and Fowl Marketing Board.

T.E. Sydness, secretary of the Alberta Agricultural Products Marketing Council, reports that only 52 producers, or 20.4 per cent of the 255 producers eligible to vote, voted to terminate the plan that established the board.

The vote was conducted in response to a petition sponsored by a group of producers known as the "Concerned Egg Producers of Alberta" who requested that a plebiscite be held to terminate the board.

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February 16, 1976

FOR IMMEDIATE RELEASE

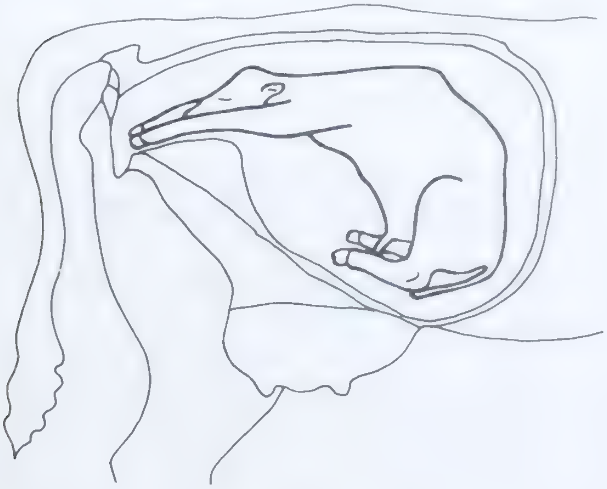
CALVING

by Dr. F. Baker
Beef Cattle Extension Veterinarian,
Alberta Agriculture

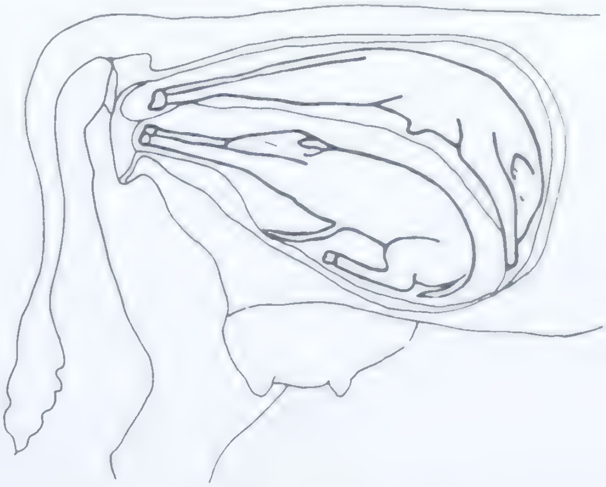
It is not unusual for cattlemen to encounter problems during calving time. Often these problems could be eliminated or more easily solved if cattlemen had more knowledge about the physiological 'mechanics' of calving.

There are two normal positions for the calf during calving. The first, and most common, is the one in which the calf comes forward with the head tucked between its front legs and the nose is a few inches from the tips of the toes.

The second normal presentation is the one where the calf comes backwards, with the hind feet first and the legs fully extended. Both of these positions are normal and there is no need to alter the positioning of the calf. The backward presentation is much less common than the forward one, but is still normal. In the case of twins, one calf is often presented backwards and the other forwards.



Normal Presentation



Normal Presentation of Twins
(If assistance is necessary, be sure to correctly identify the legs of each calf)

- (cont'd) -

Calving (cont'd)

Any deviation from either of the above positions is abnormal and almost invariably necessitates adjustments before delivery. Remember, when a calf is presented in an abnormal position, it should be corrected as soon as the abnormality is recognized. Any delay will only make the situation worse as the labor contractions of the dam will wedge the abnormally presented calf more firmly into the birth canal and make adjustments more difficult. Hence, if trouble is suspected, determine the nature of the trouble as soon as possible and take suitable action to correct it without delay.

The first stage of calving is the preparation for birth. During this stage, the ligaments of the pelvis and the associated structures relax, the cervix loses its mucous plug and dilates and the vaginal passage, including the vulva, becomes larger and lubricated. All these changes are to facilitate the passage of the calf. The duration of this stage is generally from three to six hours, and interference before it is completed should be avoided.

During the preparation for birth stage, the cow becomes restless and may even make premature straining attempts. She may stand with her tail raised and back arched. Heifers may show signs of uneasiness and abdominal discomfort as much as 24 hours before the cervix is dilated.

Remember, there should be no interference on your part before the cervix is dilated and the second stage of labor is signalled by the appearance of the water bag.

The second stage is the expulsion of the calf through the birth canal. This may take from one-half to four hours. The cow or heifer should be given about two hours before checking to see if she needs help.

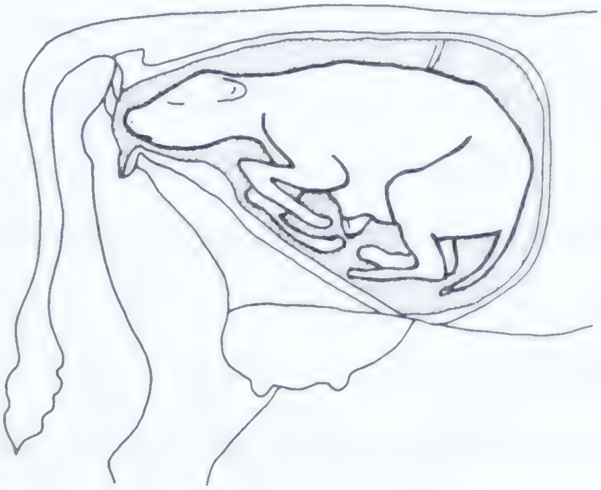
- (cont'd) -

Calving (cont'd)

Correction of Dystocia (Difficult Calving)

If you find upon inserting your hand into the vagina that the cervix will admit only two to three fingers, the case is probably one of non-dilatation of the cervix or possibly uterine torsion. You may possibly be interfering too soon. If not, call a veterinarian. He may administer drugs to attempt to dilate the cervix, but will more likely elect to perform a caesarian operation.

If the cervix is obliterated and the three essential parts of the calf (two forefeet and head or two hind feet and tail) can be felt in proper position, the problem may be one of uterine inertia and moderate traction may be applied. Bear in mind, however, that if the uterine interia is due to prolonged efforts at calving, and if much force is required to pull the calf, there is a danger of rupturing the uterus. In this case, call your veterinarian. If you find that the problem is one of deviation of the head and back or the forelimbs, the deviation should be corrected. Delivery of the calf will usually follow the correction. Sometimes deviations are minor and simple to correct, at other times they may be very difficult and necessitate veterinary assistance as soon as possible.



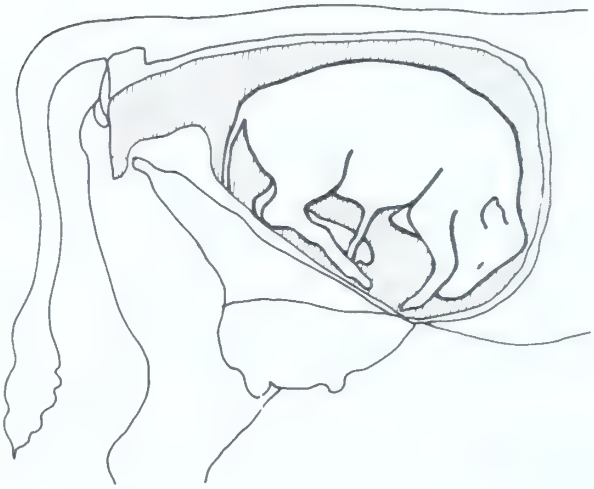
Both Forelegs Down
(If necessary, push the head back into uterus, then bring forefeet into normal position.)

- (cont'd) -

Calving (cont'd)

Similarly, deviations of the hind limbs may occur in a backwards presentation. These may be difficult to correct particularly if the calf is coming in a tail-first position or breech presentation. Call a veterinarian when feet positioning cannot be corrected easily.

If the calf is coming backwards, never attempt to turn the calf to a forward presentation. If the calf is positioned correctly, pull it. After the hips are exposed, complete the delivery as quickly as possible. Delay at this time may result in a dead calf because it must start to breathe very soon after its hips are exposed. Since the calf's mouth and respiratory passage may have become filled with uterine fluid from involuntary gasping, hold the calf up by the hind legs as soon as delivery is completed and make sure all fluid is drained out.



Breech Presentation (Hind Legs Forward)
(Carefully push the calf forward and bring the hind legs into the birth canal.)

Assisting at the Birth of a Large Calf

Proper obstetrical chains and handles are very satisfactory for assisting in the birth of a large calf. They are easy to clean and disinfect and easy to apply and remove. Clean nylon ropes may also be used.

It is vital that you work with the cow, timing your pulling with her straining or contractions It is also important that you follow the natural lines of calf delivery, making use of both the natural curvature of the calf and the birth passage. This means pulling in a horizontal or slightly upward direction until the head and trunk are delivered and then in a downward direction towards the hocks until delivery is complete.

- (cont'd) -

Calving (cont'd)

Lubrication of the birth passage and your hands and arms with a good commercial lubricant, obtainable from your veterinarian, will greatly facilitate the delivery of a large calf.

Advance only one leg at a time and be satisfied with only an inch or two of progress – even less in tight situations such as when the shoulders begin to come through. Don't hurry. Coincide your pulling with the cow's straining efforts and allow time for the birth passage to fully expand. A well lubricated hand used in a 'shoe horn fashion' may help in the delivery of the head.

If a hiplock occurs, try to free the calf by turning it in the birth canal. Do this by wrapping a sack around the exposed part of the calf's trunk and turning it 30° to 60° in either direction. Failing this, it may help to turn the cow on her side and pull the calf down towards her hocks. Remember, excessive traction on the calf may severely injure it or the cow.

If you are not sure of the calf's position, or confused about identifying the parts you can feel, call your veterinarian. Twins are not very common in cattle, but do not forget the possibility.

Care of the Calf

If the cow will take to the calf, let her do so. There is no better stimulus for a newborn calf than the vigorous licking of its mother.

Make sure all mucus is cleared from the mouth and upper respiratory passages. If the calf fails to breathe immediately after birth, try tickling its nose with a straw or vigorously massaging the chest. If this fails to stimulate breathing, give artificial respiration either by mouth to nose resuscitation or by raising and lowering the uppermost forelimb and simultaneously pressing and releasing the rib cage. Stop when the calf starts to breathe or you may over-oxygenate it.

Disinfect the navel with tincture of iodine (2 1/2 per cent). See that the calf gets at least 3 pints of colostrum in the first two hours after birth.

- (cont'd) -

Calving (cont'd)

Care of Cow

Don't forget the cow's comfort. She will probably appreciate a drink of water at this time.

Following a difficult birth, check for tears in the vagina or uterus. Tears in the vagina, unless extensive, are not too serious, but uterine tears demand immediate veterinary attention.

Occasionally the uterus will be pushed out (uterine prolapse) either with the calf or soon after its birth. If this happens, waste no time in calling a veterinarian.

If the cow is unable to rise, make sure that she is sitting up and that her hind end is not lower than her front end. Make her comfortable with dry bedding. If the nerves to the legs have been damaged and the cow is paralysed, it may be several days or even weeks before she gets up. In this case, keep her clean behind and turn her frequently to prevent 'bed sores'.

Retained Placenta

A cow normally loses her afterbirth within two to six hours after giving birth. If she retains it longer than this and shows no signs of sickness, there should be little cause for alarm.

It is advisable, however, to insert a couple of uterine boluses into the uterus, but no attempt should be made to remove the placenta. The majority of cows will expel the placenta sometime during the next two days. If this does not happen, manual removal of the placenta without injury to the cow is impossible in most cases.

If the placenta is still retained on the third day, or if the cow appears sick before this time, consult a veterinarian.

Important Principles of Helping at a Difficult Calving

These may be counted on your fingers; five 'don'ts' and five 'do's'.

- Don't be in a hurry to interfere. 16

Calving (cont'd)

- Don't attempt the job without plenty of water and soap.
- Don't use such things as trucks, tractors or horses for pulling the calf.
- Don't pull on the calf unless there are three things in the pelvic inlet or birth canal — either two front feet and a head or two hind feet and a tail.
- Don't delay in calling your veterinarian in difficult cases.

- Do be gentle — the cow feels pain as much as you do.
- Do be scrupulously clean. Wash your hands and arms and the cow's external genitalia thoroughly before starting to work and every time the cow defecates. Remember, too, that the calf bed and birth passage are made of fragile living tissue that are easily torn.
- Do recognize your own limitations. If you cannot manage the problem stop before the cow is exhausted and the genital passage swollen and inflamed. Call your veterinarian.
- Do make sure that you insert some uterine boluses in the uterus after calving if you have had your hand in the reproductive passage.
- Do make sure that the calf gets sufficient colostrum in the first two hours after birth.

February 16, 1976

FOR IMMEDIATE RELEASE

FARM MACHINERY SPECIALIST APPOINTED

Murray Green has been appointed farm machinery specialist for Alberta. His appointment was announced by George Calver, acting head of Alberta Agriculture's engineering and home design branch.

Mr. Green will be working out of Calgary until the office facilities at Airdrie are completed in about a year from now. His responsibilities will include the evaluation of farm machinery systems. He will also develop machinery maintenance programs and help farmers to choose machinery that is suitable for their production needs.

Mr. Green was born and raised in Saskatchewan and obtained his B.E. (agricultural engineering) from the University of Saskatchewan in 1967. Prior to joining Alberta Agriculture just over three years ago as regional agricultural engineer for the Fairview area, he was employed in Western Canada by the J.I. Case Company.

His work with the J.I. Case Company, plus his specialization in agricultural engineering at the University of Saskatchewan and his experience with Alberta Agriculture in the Peace River region, has equipped Mr. Green to provide Alberta farmers with useful information in the area of agricultural machinery.

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Alberta

February 16, 1976

FOR IMMEDIATE RELEASE

MARKETING OFFICER APPOINTED

Dianne Hayward has been appointed marketing officer with the Edmonton office of Alberta Agriculture's nutrition and food marketing branch. Her appointment was announced by Fran Cullen, commissioner of the branch.

Mrs. Hayward's responsibilities will be to work with Alberta food processors and agricultural boards and commissions to facilitate the marketing of their products at the consumer and retail level.

Born and raised in Edmonton, Mrs. Hayward graduated in 1970 with a B.Sc. (home economics) from the University of Alberta. Following graduation she participated in an Alberta pork promotion campaign and spent 18 months as a district home economist at Westlock and Barrhead.

From 1971 until 1974 Mrs. Hayward lived in Australia where she worked for the nutrition and consumer division of the Bread Research Institute, and taught food and consumer studies in a technical college. She spent one year travelling before returning to Canada in 1975.

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Alberta

February 16, 1976

FOR IMMEDIATE RELEASE

AGRICULTURAL ECONOMIST APPOINTED

The head of Alberta Agriculture's production economics branch, K.D. Porter, has announced the appoint of Jan van Egteren to the position of agricultural economist with the branch.

Mr. van Egteren will be working in the area of livestock production economics. In this position he will be responsible for carrying out production economics studies in co-operation with regional economists and district agriculturists.

Mr. van Egteren was born and raised in Taber and attended the University of Lethbridge. He graduated in 1974, having specialized in economics. He has now completed his studies towards a masters degree in agricultural economics at the University of Alberta.

During the past year Mr. Egteren was employed as a research economist by the Commission of Inquiry into the Marketing of Beef.

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AGRI-NEWS

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Alberta
AGRICULTURE

February 23, 1976

FOR IMMEDIATE RELEASE

TRAINING FOR QUALIFIED FOOD PROCESSORS

The demand for highly qualified personnel at all levels of the food industry is continuing to grow.

Processing and testing methods and equipment are becoming more complex all the time, and more convenience foods are being developed for modern living. More food crops are being processed, and fabricated foods are being developed to provide adequate levels of protein, vitamins and other essential nutrients. Meat analogs are being manufactured from plant proteins and new protein sources are being exploited to help feed the world's ever increasing population.

Where will all the scientists and food technologists come from to fill the positions being created by this rapidly expanding industry? How does a prospective food industry employer go about finding 'his man'?

There are two main sources from which qualified personnel may be obtained in Alberta. One is the University of Alberta and the other is the Northern Alberta Institute of Technology (NAIT).

At the University of Alberta a four-year interdisciplinary program, leading to a B.Sc. (food science) was initiated in 1966. It is based on a curriculum suggested by the Institute of Food Technology (U.S.A.) and the Canadian Institute of Food Science and Technology.

It gives the students an excellent grounding in the basic sciences and a broad training in food chemistry, food microbiology, food engineering and food processing. Specialization in any one of these four areas is also possible.

The University of Alberta's School of Household Economics also educates potential employees for the food industry. The program gives students a good background in the basic sciences as well as providing courses in nutrition, experimental foods, food quality and consumer acceptance of foods. It leads to a B.Sc. (household economics).

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Training for Qualified Food Processors (cont'd)

Graduates of the B.Sc. (food science) program are eligible to become inspectors in government departments (dairy, food and drug, etc.) and in food processing plants. They are also eligible for supervisory positions in large industrial plants and in government laboratories. Others take jobs which involve product development.

Graduates of the B.Sc. (household economics) may become dieticians, consumer specialists and product promotion officers.

The NAIT program is designed to complement the University of Alberta's food programs. It is a two-year technology program which includes the basic subjects of chemistry, physics, biology, microbiology, biochemistry, engineering, psychology and industrial relations and courses in food technology.

Food technologists, as the graduates of this program are called, work with the food scientists to provide the vital link between the producer and the consumer. Their goal, like that of the food scientist, is to manufacture better foods more efficiently through the selection of the proper raw materials and ingredients, and the development of new processes, equipment and testing procedures.

The work of a food technologist includes the chemical, physical and microbiological testing of foods before and during processing. They are also concerned with quality evaluation and quality improvement as well as the development of new processing methods and new products. Food technologists find employment in food plants as processors and supervisors.

On-the-job training is another method of providing the food industry with the calibre of workers it requires. These courses may be held one evening a week for several weeks either at the employee's place of work or at another location.

Last year the City of Edmonton sponsored one of these courses which proved so successful that one company, which had originally sent 30 supervisors to the course, then sent 140 of its regular employees.

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Training for Qualified Food Processors (cont'd)

The commissioner of Alberta Agriculture's agricultural processing branch, Ray Dixon, says "In the past fitting trained personnel into the foods industry was to some extent a haphazard business with some people getting into a particular job because they happened to be in the right place at the right time. However, with today's specific types of training for specific jobs, food processors in Alberta can now hire an appropriately trained person for any job in the food industry."

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February 23, 1976

FOR IMMEDIATE RELEASE

INTERNATIONAL EXCHANGE PROGRAM MAKES MORE RESPONSIBLE CITIZENS

More than 600 students from around the world participated in the International Agricultural Exchange Program last year.

This fact was announced at the annual evaluation meeting of the International Agricultural Exchange Association (IAEA) which recently took place in Denmark. It was attended by representatives from those who participated in the program last year, host families, colleges involved in the exchange and departments of agriculture from all participating countries.

The exchange program provides an opportunity for European, Australian, New Zealand and Canadian farm men and women between the ages of 18 and 25 years to work in each other's countries.

Following is a breakdown by countries of the number of students who participated in last year's program:

Australia - 43
New Zealand - 41
Canada - 83
Switzerland - 83
Germany - 38
Denmark - 169
France - 6
United Kingdom - 76
Ireland - 2
Norway - 6
Holland - 10
Sweden - 58
Finland - 5

Australian, New Zealand and most European exchangees leave for Canada in April of each year and return to their own country in October. However, some European exchangees leave for Canada in July and return in October.

Canadian and European exchangees go to Australia and New Zealand in November and return to their own countries the following April. Canadian, Australian and New Zealand exchangees go to Europe in April and return home in October.

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International Exchange Program Makes More Responsible Citizens (cont'd)

All those who take part in the program have to have an agricultural background and many of them have attended an agricultural college or university in their own country. They pay their own way and are placed on approved host farms where they live and work with the family. They receive the regular farm wage of the country in which they are living and are given time off to learn about their host country.

Canada, Australia and Europe all have host family associations which determine the eligibility criteria for host families in their respective countries and generally oversee the operation of the exchange program.

Upon arrival in Europe or one of the other countries the exchangees spend five days at an orientation conference. These are held at the following locations:

Canada - Olds College, Olds, Alberta and the Brandon Extension Centre, Brandon, Manitoba

Australia - Marcus Oldham College, Geelong, Victoria

New Zealand - Lincoln College, Canterbury

Europe - Lyngby Landbroughshale, Denmark

Walter McNary, who represented Alberta Agriculture at the IAEA meeting, reports that the student evaluation committee (made up of representatives from last year's exchangees) was unanimous in its opinion that the exchange program broadens the agricultural and world outlook of those who participate and makes them more responsible citizens.

February 23, 1976

FOR IMMEDIATE RELEASE

HONEYBEES FROM MEXICO

Prices of honeybees imported this spring by Alberta Agriculture from Mexico are expected to be in the neighborhood of last year's prices.

Mexican queens cost $4.25 each last year when the number ordered was from one to 24. If more than 24 were ordered the cost was $4 a queen. In addition to 4,000 queens, the Mexican shipments will include 1,500 packages of bees. These two-pound packages are expected to cost the Alberta beekeeper around $18 each.

The Alberta Honey Producers' Co-operative in Edmonton will again be handling the importation and distribution of both the queens and package bees from Mexico. Distribution is expected to take place during the first two weeks of April.

The bees that will be coming to Alberta from Mexico this spring are the offspring of 300 queens that were sent from here to Mexico last fall. They went to a number of commercial beekeepers, including the world's largest queen breeder, Miel Carlota, for multiplication.

Alberta sent its own queens to Mexico so that they could get back the strain of bees that are best suited to our climatic and environmental conditions. According to provincial apiarist, Dr. Ulf Soehngen, the majority of the honeybee strains currently in use in Mexico are very aggressive. They have been selected for this characteristic to discourage hive pilfering in the outlying areas. This characteristic is not desirable here because there is no need for the bees to protect their hives and an aggressive disposition makes them more difficult to handle than our present strains.

-(cont'd)-

Honeybees From Mexico (Cont'd)

Most of the Alberta bees that went to Mexico last fall were Caucasian bees that were produced in Alberta last year and came from stock that originated in northern Saskatchewan. This strain tends to be more winter-hardy than the Italian strain (the other strain used here), an important consideration in view of the increasing number of beekeepers who are now overwintering their colonies.

The reason the Alberta Government decided to import queens and package bees from Mexico was to ensure its beekeepers a supply of relatively high quality queens at a price that is lower than that currently being charged in the United States.

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February 23, 1976

FOR IMMEDIATE RELEASE

VARIETIES OF CEREALS AND OILSEED CROPS FOR ALBERTA

"Varieties of Cereal and Oilseed Crops for Alberta - 1976" contains a number of new cereal and oilseed varieties. It is prepared by the Alberta Cereal and Oilseed Advisory Committee of the Alberta Agricultural Co-ordinating Committee.

Wheat

Sinton wheat is a bearded, red spring wheat that yields 2 to 5 per cent less than Neepawa and is slightly later maturing than Neepawa. It is mainly suitable for areas where the risk of rust occurring is high.

Barley

Windsor barley is recommended as a feed barley. Its maturity is classed as medium, and it yields about the same as Galt. It shows fair resistance to lodging and shattering but has poor resistance to loose smut. Its main attribute is its resistance to scald.

Oats

Cavell oats have good yielding ability and are early maturing. In fact, this variety matures about three days earlier than Random and five days earlier than Fraser. It yields as well as Fraser slightly less than Random and slightly more than Rodney. It has good resistance to lodging and shattering. Certified seed may not be available until the fall of 1977.

Gemini oats can be used for grain or for hay or silage. Their forage yield potential is equal, but not superior, to the best forage yielding oat varieties. The grain yield potential of this variety is at least equal to the best grain producing varieties. Gemini oats are medium-late in maturing and have good resistance to lodging and shattering.

-(cont'd)-

Varieties of Cereals and Oilseed Crops for Alberta (cont'd)

Rapeseed

R-500 is a new, high erucic acid, Polish rapeseed variety which should be grown only under contract. Its erucic acid content is higher than 50 per cent. It matures about 10 days later than Span and is susceptible to Alternaria black spot and flea beetles. It yields about 80 per cent as much as Torch.

Flax

Dufferin flax yields about 3 per cent more than Redwood 65 in south-eastern Alberta (light brown soil zone), but it matures slightly later than Redwood. Since its main attribute is rust resistance it is not particularly interesting to Alberta farmers.

Linott flax is a medium-early maturing variety which yields slightly less than Noralta. Like Dufferin, its main attribute is rust resistance.

"Varieties of Cereals and Oilseed Crops for Alberta - 1976" can be obtained from all district agriculturists and from the publications office, Alberta Agriculture, Agriculture Building, 9718 - 107 Street, Edmonton.

February 23, 1976

FOR IMMEDIATE RELEASE

1976 PESTICIDE APPLICATORS TRAINING COURSE

If you are planning to attend the 1976 pesticide applicators' training course, the only one of its kind in Western Canada, you are asked to register before March 1.

The course will be held at the Olds College, Olds, from March 15 to 27 inclusive. Anyone who does not register until the first morning of the course will be charged a late registration fee of $5.

The course is divided into two parts. The first week (March 15 to 20) will consist of practical studies in the areas of insects, plants, plant diseases, application equipment, chemical selection, formulations, calibration and safety equipment.

People interested in this part of the course must register for the full week, and will probably want to register for one or more days in the second week.

The second week (March 22 to 27) is a series of 'special days' which will be offered on an individual basis. This part of the course is designed for specialist groups and will include up-to-date information for applicators with previous training and experience.

The tuition fee for the pesticide applicators' training course will be $5 per day. Some accommodation will be available at the college, and meals will be available for all course participants at the college's cafeteria. Board and room, if the latter is available, will be $10 per day.

Details of the course content can be obtained from the registrar, Olds College, Olds, Alberta.

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February 23, 1976

FOR IMMEDIATE RELEASE

DIAGNOSTIC LABORATORIES

Did you know that Alberta Agriculture's veterinary services division has three diagnostic laboratories where diagnostic services are performed free of charge?

The main one is located in Edmonton at the O. S. Longman Building (6909 - 116 Street). The other two are at Fairview and Lethbridge and a third is expected to be built at Airdrie in the near future.

These laboratories are designed to help diagnose livestock diseases so that effective treatment can be started as soon as possible. They accept any animal specimen or a portion of an animal, but the ideal specimen is a whole animal that has very recently died or an animal that is sick and near death.

Anybody can submit a specimen to these laboratories, but laboratory staff much prefer that specimens be submitted through a veterinarian who is familiar with the disease pattern and management on the farm from which the animal comes. Positive results are more likely to be achieved when this routine is followed.

The veterinary services division is also responsible for a toxicology laboratory, located in the O. S. Longman Building, which is equipped to test for poisonous materials and to examine samples of water that is being, or will be, used for livestock.

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February 23, 1976

FOR IMMEDIATE RELEASE

TARGET DATES FOR METRIC CONVERSION

Some of the target dates for metric conversion have come and gone!

Metric measurements are now being used to identify the contents of snackfood packages, soft drink bottles and toothpaste tubes. The temperature is measured in degrees Celsius, rain in millimetres and snow in centimetres. Clinical thermometers in degrees Celsius are being promoted for use by the general populace.

The Canadian Government Standard Board's specifications for cooking measurements is now available to the public. It sets out the measurements that will replace the teaspoon, tablespoon, cup, etc.

Alberta began introducing SI (International System of Units) at the elementary school level last year and is expected to have completed the project by June 1978.

Following are the proposed target dates for introducing metric measurements in to various sectors of industry. It is possible that some of the proposed dates may be changed later.

Early 1976	Automobile speedometers will start to be marked in kilometres.
March 1976	Most toilet goods will be packaged in metric sizes.
April 1976	Atmospheric pressure will be given in SI units (kilo pascals), visibility will be given in metres and wind speeds in kilometres per hour.
Spring 1976	Conversion to metric packaging of sugar will be completed.
Summer 1976	Events held at the Olympic Games in Montreal will be announced in metric measurements.
September 1976	The shoe industry has recommended September as the date for converting to the metric system.

- (cont'd) -

Target Dates for Metric Conversion (cont'd)

January 1977	Car speedometers will be calibrated in metric units. Odomoters and trip record counters will be calibrated in kilometres by September 1977.
January 1977	Conversion of retail milk packaging to litres will be complete in Quebec. Other provinces are scheduled to follow.
February 1977	All grain sales will be conducted in tonnes.
May 1977	Textile orders will be booked in centimetres and metres.
September 1977	All road signs in Canada will be converted to kilometres and kilometres per hour.
December 1977	Completion of metric conversion in the wine industry.
January 1978	Government building tendering will be done in metric units.
January 1978	Beginning of conversion of edible oil products to metric packaging.
January 1978	Conversion of ice cream packaging to metric units will be completed.
January 1978	Metric weighing scales in the retail trade will be introduced in three pilot conversion areas. These areas will be Kamloops, B.C., Peterborough, Ontario, and Sherbrooke, Quebec.
January 1978	All metric-sensitive statistics of Statistics Canada will be published in metric units, and where user-demand still warrants it, in Imperial units as well.
July 1978	Weighing scales will be converted to the metric system in the food retail industry.
January 1979	All wine sold in the U.S.A. will be bottled in metric sizes. Seven metric sizes will replace 16 U.S. and 27 other imported sizes.
April 1979	Completion of design conversion to permit construction of roads in metric units.
January 1980	Completion of conversion of biscuit packaging in metric units.

Copies of a publication entitled "Metric Conversion" can be obtained from the publications office,

Alberta Agriculture, Agriculture Building, 9718 - 107 Street, Edmonton.

February 23, 1976

FOR IMMEDIATE RELEASE

DO-IT-YOURSELF COTTAGE CHEESE

by Jan Williams-Russell
Alberta Agriculture's District Home Economist at Stettler

Cottage cheese, a soft unripened cheese, can easily be made at home. It's made from skim milk or reconstituted instant nonfat dry milk. It's tasty, nutritious, easy to digest and low in calories!

Basically, there are two major types of cottage cheese - small curd and large curd. Small curd is the high acid cheese made without rennet, the substance that speeds curdling and keeps the curd that forms from breaking up easily and shortens the cheese-making process. By using rennet, you produce a less acid, larger curd cheese.

Cottage cheese, small or large curd may be creamed. Adding cream to cheese increases its smooth texture and flavour. Creaming cottage cheese, however, adds calories and slightly lowers the protein content.

One gallon of skim milk yields about one pound of cottage cheese.

Method I - Cottage cheese made with rennet

1 gallon sweet skim milk
3/4 cup clean sour milk
rennet tablet
4 tbsp. cold water

Add the sour milk to the sweet milk and stir as it is put in. Warm the milk over hot water to a temperature of 75° F. Remove it from the heat and place it where it can remain until set. Add 1/4 of a rennet tablet which has been thoroughly dissolved in 4 tbsp. cold water. Stir while adding the water. Cover the mixture with a cloth and leave from 12 to 16 hours in even temperature at about 75° F.

- (cont'd) -

Do-It-Yourself Cottage Cheese (cont'd)

There should be a slight whey on the top and when poured out the curd should fall apart. Drain through cotton cloth, not cheese cloth. When the whey has drained out, work one or two tsps. of salt into the cheese, according to taste.

Method II - Cottage cheese without rennet

1 gal. pasteurized fresh skim milk
1/2 cup fresh cultured buttermilk
2 qts. water (100° F)

Have the milk at 72° F. Stir in the buttermilk. Leave the mixture in the oven at 75° F until the curd forms. It takes 12 to 14 hours. Cube the curd, and let it rest for 10 minutes. Add the water which has been heated to 100° F. Set the pan on a rack in a larger pan of water and heat until the curd reaches 100° F. Hold at this temperature (not higher or the curd will toughen) for from 30 minutes to one hour, stirring gently every five minutes. Do not break the curd. As the whey is forced out, the curds will settle. When the curds are done, they should break clean between the fingers and not leave a semi-fluid milky residue. Pour the curds and whey into a cotton sack and rinse the curds with cold water to minimize the acid flavor. Let them drain in a cool place until whey ceases to drip; but the surface of the cheese should not become dry looking.

Cottage cheese is a versatile food for combining with fruits or vegetables in a salad or for a dessert. If you're fortunate enough to have a large quantity of surplus skim milk it's a good way to use it and to save money as well.

February 23, 1976

FOR IMMEDIATE RELEASE

ASSISTANT SYSTEMS ENGINEER APPOINTED

David Scott has been appointed to the position of assistant systems engineer with Alberta Agriculture's engineering and home design branch. His appointment was announced by George Calver, acting branch head.

Mr. Scott's responsibilities will include developing mathematical computer models for analyzing and designing practical on-farm production systems. Programs will be developed to size farm machinery, to analyze farm structure costs and to help farmers select forage and grain harvesting machinery on the basis of input costs.

Born in Montreal, Mr. Scott grew up in Pointe Claire, Quebec. His farm experience included working on a mixed farm near Ottawa and on a dairy farm in New Brunswick.

He obtained his B. Sc. (agricultural engineering) in 1971 from the Macdonald Campus of McGill University. He then attended the University of Alberta and graduated with a M. Sc. (agriculture), having specialized in agricultural engineering.

After graduation he joined Alberta Agriculture on a temporary basis as an assistant systems engineer. His responsibilites at that time included developing and programing a computer-based model of a grain production system for northern Alberta areas.

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AGRI-NEWS

March 1, 1976

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AGRICULTURE
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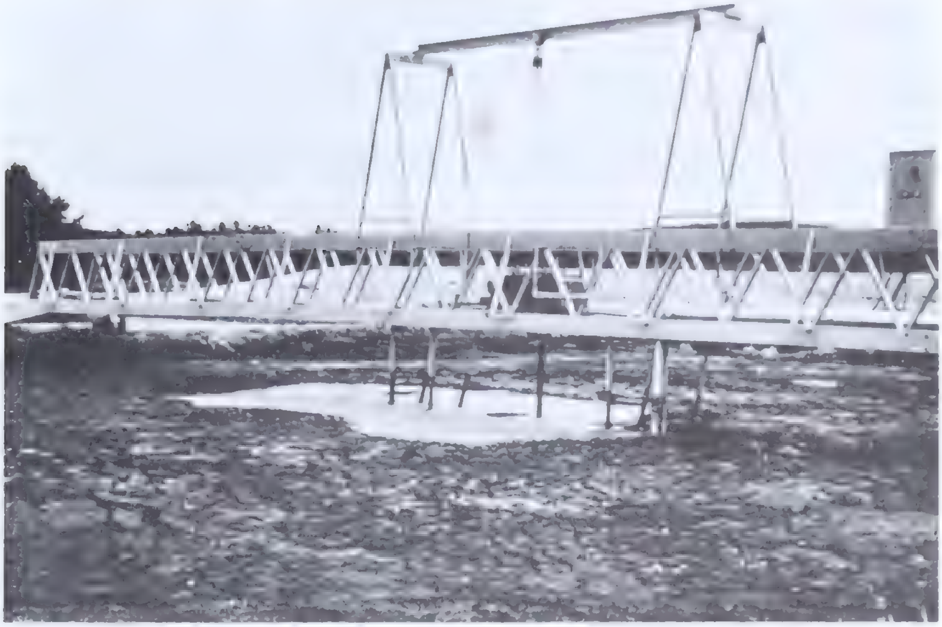
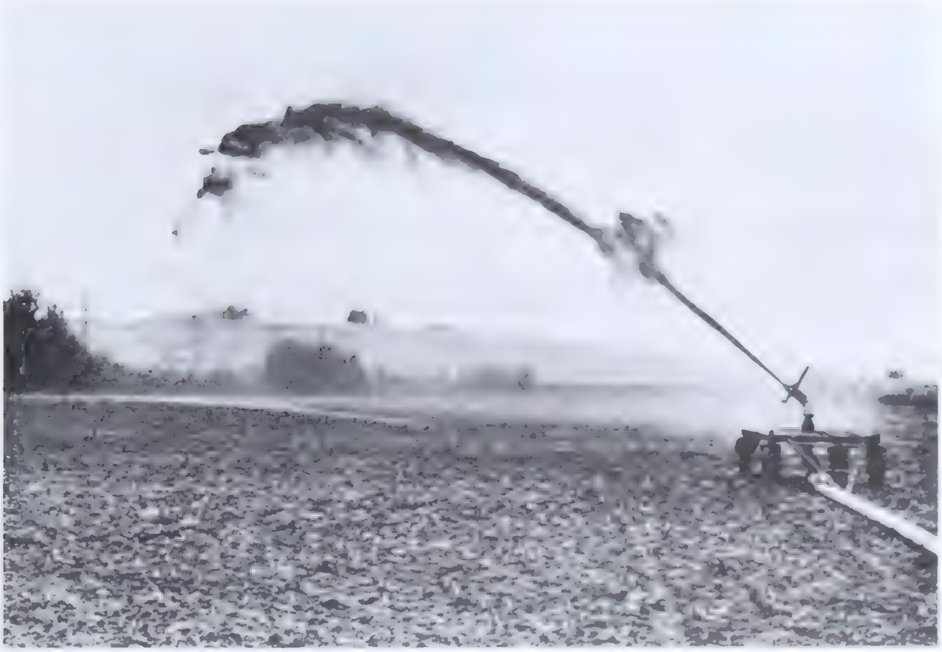
REMOVAL OF LIQUID MANURE FROM LAGOONS



This picutre shows the gantry and mixer which are part of the liquid hog manure disposal system used at Valley Farms



The manure gun spreading liquid manure over a 4-acre area of summerfallow

-(cont'd)-

Removal of Liquid Manure from Lagoons (cont'd)

Results of a study carried out by Alberta Agriculture's engineering and home design branch show that it is possible to remove liquid manure from a livestock lagoon efficiently and rapidly.

The study was conducted at Valley Farms, north of Edmonton, in an attempt to develop better techniques for handling and disposing of liquid hog manure from dugout lagoons.

The system being used at Valley Farms includes a double-trussed gantry which spans an 80 ft. x 100 ft. lagoon. A heavy duty industrial mixer driven by a 30 h.p. electric motor, and a 5 h.p. submersible sewage pump, are both suspended from the gantry. The sewage pump is suspended from the gantry at a point of high turbulence next to the mixer and feeds the conventional high head irrigation pump located on the edge of the lagoon. It is used to eliminate priming problems with the irrigation pump.

The irrigation pump forces the liquid manure through 6-inch irrigation pipe to a manure gun located in a field as far as half a mile away. This gun spreads the manure at the rate of 600 Imperial gallons per minute over a circular area of between 400 to 500 feet (4 acres). The gun is capable of passing 1-3/4 inch solids.

The study results showed that a mixing and sprinkler irrigation system can provide a workable method of disposing of liquid animal wastes in medium to large-sized hog operations. The system at Valley Farms facilitates effective and rapid removal of the liquid manure on a semi-annual or annual basis. This long storage period allows maximum use to be made of the nutrients in the manure by making it possible to spread it on cropland at the optimum times.

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Removal of Liquid Manure from Lagoons (cont'd)

Equipment costs were high in this prototype system, but Brian West, Alberta Agriculture's animal waste management specialist, feels that they could be reduced in subsequent systems by making the lagoon either circular or square; by using a fixed position for the mixer on concrete pilings instead of using a gantry; and by correctly sizing the mixer and regularly cleaning out the lagoon. Also, subsequent systems are always cheaper to construct than the original prototype.

Mr. West says "The total annual costs of the system at Valley Farms works out to $3.64 per hog marketed. This seems high, but it does not take into consideration the nutritive value of the manure on the cropland."

Mr. West also points out that using sprinkler irrigation to spread liquid manure on an annual or semi-annual basis facilitates excellent recovery of the nutrients when it is used in conjunction with a good cropping program. In fact, he believes that from the point of view of overall returns, this system compares very favorably with conventional systems because the latter do not make as efficient use of labor or nutrient recovery. "Exact 'net cost' and 'net return' figures are difficult to arrive at", he says, "until more studies have been done to fully assess the value of applying liquid animal wastes to agricultural cropland."

A detailed report on the Valley Farms study is available, free of charge, from Brian West, Alberta Agriculture, 4747-50 Street, Red Deer, T4N 1X3.

March 1, 1976

FOR IMMEDIATE RELEASE

RAPESEED PRICE OUTLOOK

An improvement in the world rapeseed market is expected by the end of this year

Tom Rackham, international development co-ordinator for Alberta Agriculture, believes that the rapeseed market is now at the bottom of the cycle and that the only direction it can go from here is upward! He says, "The increasing volume of palm oil in the trade has been responsible for the present depressed edible oil market". Prior to the appearance of this large volume of palm oil, the market had been unrealistically high for about three years because of the failure of the fishing industry in Peru.

Although palm oil appears to be a competitor of both rapeseed oil and soybean oil, it is, in fact, complementary to rapeseed oil in that it can be mixed with rapeseed oil to produce top quality edible products. This fact could well serve as a stabilizing influence on both domestic and export markets, and make rapeseed oil more competitive with soy oil. Soy oil does not produce as favorable a mixture as rapeseed when mixed with palm oil.

According to Mr. Rackham, the future also looks brighter for rapeseed meal. He expects the demand for this product to increase as a result of greater familiarity on the part of users with rapeseed meal and current lower meal prices. He also hopes that the expected introduction of protein concentrating techniques will improve the competitive position of rapeseed meal in relation to other protein supplements..

Mr. Rackham points out that Alberta's increased crushing capacity will necessitate the maintenance of the present level of rapeseed production. "It is suggested", he says, "that the minor

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Alberta

Rapeseed Price Outlook (cont'd)

role that rapeseed occupies in Canada's international trade (2 to 4 per cent) means that rapeseed oil prices should not vary from the world price even if the Canadian crop should be in excess of domestic needs".

Mr. Rackham stresses that rapeseed producers in Alberta should not be content with a yield of 17 to 18 bushels per acre (the average yield at the present time) but should aim for 30 bushels per acre. "This yield can and is being obtained by the province's efficient growers," he says.

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March 1, 1976

FOR IMMEDIATE RELEASE

PREDATION LOSSES IN SHEEP

Predation losses in Alberta's sheep and lamb populations in 1974 were 1.6 per cent and 2.8 per cent respectively.

These figures were obtained from province-wide personal interviews with sheep producers. The interviews were carried out last year by Dr. Michael Dorrance and Lawrence Roy of Alberta Agriculture's plant industry laboratory, and will be used for planning new predator control programs and evaluating existing ones.

The interviews showed that predation losses vary greatly from one area of the province to another. They were lowest in the parkland area south of Calgary where 0.8 per cent of the ewes and lambs were taken by predators. They were highest in the mixed forest area of northern Alberta where 1.9 per cent of the ewes and 6.8 per cent of the lambs were lost to predators.

Predation across the province accounted for 24 and 18 per cent of the total mortality in lambs and ewes respectively in 1974. Thirty-nine per cent of the flock owners interviewed had had no predator losses, while 31 per cent had sustained predation losses of 3 per cent or less.

The interviews also showed that large flocks tended to be more susceptible to predation than smaller flocks, and that coyotes were responsible for 88 per cent of predation losses. Dogs and other large predators accounted for the remaining losses.

A complete report on predation losses in sheep in 1974 may be obtained from the Plant Industry Laboratory, Alberta Agriculture, O.S. Longman Building, 6909 - II6 Street, Edmonton,T6H 4P2.

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March 1, 1976

FOR IMMEDIATE RELEASE

PROPOSED GRASS AND LEGUME SEED ORGANIZATION

A forage seed study group, appointed by Alberta's Minister of Agriculture, Marvin Moore, is presently evaluating the merits of an organization that would serve the interests of people who produce and market grass and legume seeds in Alberta.

To help them carry out this evaluation, they are mailing out questionnaires to all seed producers in the province and are holding a series of meetings at various locations throughout the province. They have already prepared a draft of an organization that they hope will be acceptable to all sectors of the industry.

The proposed organization would serve as a vehicle for distributing promotional, research, production and marketing information to seed producers. It is also intended to improve communication among growers, the trade and government.

The study group is made up of representatives of major farm organizations, seed growers, the seed trade and government. It includes representatives from British Columbia because the geographical nature of seed production necessitates an informed and co-ordinated effort with that province.

Marcel Maisoneuve of Alberta Agriculture, and co-ordinator of the study group, reports that Alberta accounts for more than 50 per cent of Canada's total grass and legume seed production and that her main export markets, the United States and Europe, import over 50 per cent of this production. However, changes in the international marketing system are placing Canada's seed industry in an increasingly restrictive position. Mr. Maisoneuve points out that in addition to the normal price fluctuations related to supply and demand, varietal purity standards, weed free requirements and trade barriers are being continually tightened up.

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March 1, 1976

FOR IMMEDIATE RELEASE

FARM ACCIDENT SURVEY RESULTS

Results obtained from a study carried out by Alberta Agriculture's farm development division last year show that a considerable number of people are injured on Alberta farms each year, and that there is an urgent need for a thorough, continuing farm accident reporting system in this province.

Despite the high risk involved in farming - it is reported to be the third most dangerous occupation in North America - little or no work has been done up to the present time to provide meaningful statistics on farm accidents in Alberta. Although local studies have been carried out in Ontario, Quebec and Manitoba, no general figures on the number of non-fatal accidents exist for Canada.

The researchers in the Alberta study, Solomon Kyeremanteng and Douglas Taylor (the latter is Alberta Agriculture's representative on the Alberta Safety Council's Rural Safety Committee) mailed out approximately 4,000 farm accident questionnaires last summer to participants in the provincial Summer Farm Employment Program (S.F.E.P.).

The questionnaires were divided into two parts.Part one covered actual farm accidents in which the participants had been involved or had known somebody who had been involved between January 1 and July 31 of 1975. Part two contained questions designed to obtain information on the attitudes of those reporting farm accidents to farm accidents in general.

Approximately 2,500 S.F.E.P. participants returned the questionnaires which were then analyzed by computer. Of the 64 accidents reported, 52 had been sustained by S.F.E.P. participants. Four had happened to a father, brother or sister of the respondent, two had involved other relatives and the remaining six were not identified by the informant.

Sixteen of the accidents reported occurred in the field; 13 in the farmyard, eight in farm buildings; five in the home yard or on the road; two in the home and one in the lane and six elsewhere.

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Farm Accident Survey Results (cont'd)

In eight cases the location of the accident was not given.

Forty-four of the reported accidents were slight, 11 were serious and one was fatal. Fingers were involved in 13 accidents; a hand or a leg, in eight and a foot, in seven. Tools accounted for 21 accidents; vehicles, for 19; farm machinery, for 12 and livestock, for nine.

The second part of the questionnaire delt with awareness of potential danger and responsibility for the prevention of farm accidents. Forty of the 64 people who reported accidents said that they understood the causes of farm accidents and believed that with care and attention the accidents could be prevented.

However, only 26 of these 64 respondents perceived safety to be their own responsibility. The other 38 seemed to feel that safety is automatic if one uses common sense and is mechanically minded.

Despite the limitations of the study, in that it covered a transient population that consisted mostly of young students who were not under the pressure that most farmers are under, it reaffirmed some previously obtained findings in both Canada and the United States.

One of these findings suggested that accident rates can be reduced through safety orientation seminars. An evaluation of safety orientation seminars attended by S.F.E.P. participants indicated that their attitude towards safety was considerably improved after they had attended the seminars.

The researchers also found unanimous agreement among a number of Alberta organizations that a farm accident reporting system is fundamental to the success of any meaningful farm or rural safety program.

They concluded that there is an urgent need for a thorough, continuing farm accident reporting system in Alberta to determine the true hazards involved in the farming industry; to obtain the basic data required for an accident statistical analysis and to identify those areas of accident prevention that should be incorporated into new and more extensive safety programs in Alberta.

March 1, 1976

FOR IMMEDIATE RELEASE

IRON BACTERIA IN FARM WATER SUPPLIES

The problem of iron bacteria in farm household water supplies is a very common one in Alberta.

Iron bacteria live in water that contains inorganic iron or in water that is in contact with iron,and iron bacteria are found in shallow or deep wells, dugouts or springs. Wells located in swampy land or sloughs and wells subject to high rates of surface water inflow are especially susceptible to infestation by iron bacteria. Iron bacteria can also be introduced to a water supply by the use of contaminated pumping or well drilling equipment.

According to Andrew Livingstone, engineering technologist with Alberta Agriculture, the most noticeable manifestation of iron bacteria is a brownish-black slime in the toilet tank and a similar slime coating on other bathroom and on kitchen fixtures. This slime rapidly clogs metal and plastic pipes and has a corrosive effect upon pumps, pressure tanks, galvanized pipes and fittings. In time, iron bacteria will cause reduced flow rates through, and reduced pressures within, the supply system, rendering it ineffective. Also, undesirable tastes and odors often develop.

In most cases, iron bacteria can be controlled or eliminated by a simple procedure known as 'shock chlorination'. Details of this procedure as it relates to the individual farm household water supply system can be obtained from your local agricultural engineering technologist or by contacting your district agriculturist.

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March 1, 1976

FOR IMMEDIATE RELEASE

CALF SCOURS

by Frank Baker
Beef Cattle Extension Engineer
Alberta Agriculture

Recent research in Western Canada has shown that good management is the only real solution to the calf scour problem which is estimated to cost Alberta cattlemen $14,000,000 a year.

Probably the most significant of a number of management factors which are now being stressed is the importance of colostrum (first milk) to a newborn calf. Besides being rich in essential nutrients, it contains immunoglobulins which in turn contain antibodies against disease. Without these antibodies, a calf has little chance of combatting scours.

Unlike human babies, calves are born without antibodies and must obtain them quickly through the colostrum.

'Quickly' is the key word! It is most important that the newborn calf receives a sufficient amount of colostrum within two to three hours of birth. After six hours, something, as yet unexplained, happens to the intestinal wall that prevents absorbtion into the calf's body of any appreciable quantity of antibodies.

Calves which have a high level of antibodies are not completely immune to calf scours, but usually have a milder illness and have a much better chance of recovering.

The majority of calf scour cases occur in calves under two weeks of age. The chances of a calf under 14 days of age dying from calf scours is three and a half times greater than that of a calf which is older than 14 days.

Another significant finding is that calves born to first-calf heifers are twice as susceptible

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to scouring as calves born to older cows, and they are four times more likely to die from scours than other calves.

Heifers

Because heifers are often confined in a small area so that they can be watched, the chances of a concentration of infection and its rapid spread to newborn calves are high. Then, because heifers often have difficulty calving, their calves are likely to be weak and unable to suckle during the first few critical hours when the antibodies in the colostrum are readily absorbed by the intestinal wall.

A further point is that heifers often do not have sufficient colostrum to ensure that their calves receive an adequate supply of antibodies to combat disease. It has been calculated that an 80-pound calf needs at least one to two pints of colostrum during the first two to three hours of life and two quarts in the first 10 hours of life. Finally, since heifers have not been exposed to as wide a variety of diseases as older cows, they have a lower concentration of antibodies than a mature cow.

Extra attention, then, is needed for calves born to first-calf heifers. By making sure that they receive colostrum early, and in sufficient quantity, it is possible to greatly reduce scour problems. Colostrum from dairy cows or older cows in the herd can be stored in the deep freeze and thawed for use when the heifers are calving. It should always be thawed slowly and never be heated or refrozen. Heat will destroy the immunoglobulins.

Weather

Weather, as cattlemen know only too well, greatly influences calf scour outbreaks. In the spring break-up when calves are unable to find a dry place to lie, severe scour outbreaks often occur. Spring snow storms often herald a bout of calf scours. Some people think that the storm 'stresses' the calves, making them susceptible to disease. Others feel that nursing patterns are upset during the storm, and that

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calves overload on milk when the storm abates.

Space

There seems to be a definite correlation between the incidence of calf scours and the space available for each calving cow. The more confined the cows are at calving time, the greater the incidence of calf scours. When one or two calves start to scour in a particular area, animals that are about to calve should be moved away to break the cycle of infection.

Calving in corrals and barns, particularly when it continues year after year, would seem to be inviting calf scour problems. Open pastures with adequate protection such as windbreaks and portable calf shelters are much preferred.

Vaccines

Since the subject of calf scours is a very complex one, there is no simple solution to the problem. However, one thing seems certain - there is not, and there probably never will be, a vaccine or simple cure.

Disease-producing bacteria such as salmonella, certain strains of E. coli, and clostridia, as well as such viruses as reo, corona, bovine virus diarrhea, infectious bovine rhinotracheitis and chlamydia, have all been implicated in calf scours.

It is important to realize that a particular vaccine is specific for a particular organism. If that particular organism is causing the calf scours, then the vaccine may help to control the disease. If, on the other hand, the problem is due to any of the many other possible agents, the vaccine will not help and may even aggravate the situation.

Treatment

Treatment should be commenced as early as possible and should be aimed at removing the cause of the scours and rehydrating the calf. The calf should be given a broad spectrum antibiotic,

-(cont'd)

Calf Scours (cont'd)

recommended by a veterinarian, and electrolytic fluids (also available from veterinarians), regardless of whether or not it appears to be dehydrated. Electrolytic fluids given by mouth early in the course of the disease will greatly enhance the calf's chances of recovery and avoid expensive intravenous treatment later. The calf should also be given plenty of straw bedding to keep it warm and dry.

March 1, 1976

FOR IMMEDIATE RELEASE

SEED GROWERS ANNUAL MEETING

Did you know that the Alberta Branch of the Canadian Seed Growers' Association (CSGA) is holding its annual meeting at the El Rancho Motor Hotel in Lethbridge on March 4 and 5?

If you are interested in finding out more about pedigreed seed or would like to become a pedigreed seed grower you are invited to attend the meeting which is being held in conjunction with AG-EXPO '76 --- "Annual Seed Fair and Agricultural Machinery Show".

Among the highlights on the agenda will be an address by H.W. Leggett on the Grain Stabilization Program. Mr. Leggett is director of Agriculture Canada's grains and special crops division in Ottawa.

Reinholdt Lehr, commissioner of the Hall Commission on Grain Handling and Transportation and Ken Stickland of the Alberta Department of Transportation will be talking about Alberta's railway and elevator systems.

Orville Reber, district director of the Canadian Wheat Board's advisory committee will outline what is new in that area and how the committee is working.

Jay Purnell, director of Alberta Agriculture's irrigation division, will be the guest speaker at a luncheon on March 4. His topic will be "A Look at Irrigation".

Alex Johnston of Agriculture Canada's research station at Lethbridge will talk on "Early Trade and Commerce in Southern Alberta" at the banquet on March 4.

A special program has been arranged for the ladies which will include a tour of Lethbridge, Canada's irrigation capital!

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Alberta

March 1, 1976

FOR IMMEDIATE RELEASE

FARM DEVELOPMENT DIVISION DIRECTOR APPOINTED

Alberta Agriculture's farm development division has a new director. He is J.L. Reid. His appointment was announced by C.J. McAndrews, assistant deputy minister of development.

As director of the farm development division, Mr. Reid is responsible for policies and programs carried out in the engineering and home design section of the division. In addition, he initiates and carries out negotiations pertaining to policies, agreements and contracts with federal and provincial agencies, and oversees the administration of the Alberta Farm Implement Act. He is a board member and vice-chairman of the Prairie Agricultural Machinery Institute Council.

Mr. Reid is also responsible for policies and programs carried out under the farm development division's rural services section. This section administers agricultural service boards, agricultural societies and agricultural development committees.

Mr. Reid was born and raised in Lethbridge. He graduated from the Olds College in 1940. He enrolled in the University of Alberta and then joined the RCAF, serving overseas until the end of the war. He returned to the University of Alberta's agriculture faculty, graduating with a B.Sc. (agriculture) in 1946. During the next two years he attended the University of Saskatchewan where he obtained a B.S.A. and an M.Sc. (agricultural engineering).

From 1948 to 1954 Mr. Reid was agricultural engineer and resident manager with Imperial Oil Limited in Edmonton. He spent the following year as assistant professor at California State University, California, U.S.A., and then joined Alberta Agriculture as assistant extension engineer. He later became head of the engineering branch and then acting director of the farm development division, the position he held prior to his present appointment.

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March 8, 1976

FOR IMMEDIATE RELEASE

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March 8, 1976

FOR IMMEDIATE RELEASE

PROCESSED ALFALFA SITUATION

Processed alfalfa prices have strengthened in Alberta since the beginning of the year and domestic demand has been excellent, says Don Macyk, one of Alberta Agriculture's marketing analysts.

He reports that processed alfalfa has been steadily moving into the domestic market and that only about 20 per cent of production remains in storage at Alberta plants. Ten per cent of these stocks are in the Peace River region, 40 per cent, in the Edmonton region and 50 per cent, in the southern part of the province.

Mr. Macyk also reports that total production for the current crop year is now estimated at 107,000 tons, up approximately 18,000 tons from last year. Between 5,000 and 10,000 tons of alfalfa hay could still be processed into sun-cured cubes and pellets, he says.

About 80 per cent of last year's processed alfalfa, or double the amount processed in 1974, is expected to go into the domestic market. Twenty per cent of the 1975 production went for export, mostly to Japan but several small lots went to the European Economic Community, mainly to West Germany.

This year Alberta will have two more alfalfa processing plants in operation than was the case last year. The two new plants, located in the Peace River region and north-eastern Alberta, bring the total to 14 plus two portable cubers. This year's total theoretical capacity of all facilities is expected to be approximately 225,000 tons of sun-cured and dehydrated pellets and cubes.

Industry Outlook

Approximately 98,000 acres of alfalfa are currently estimated to be lined up by the processors for this year's production. Several plants have indicated that they may process some alfalfa-grass mixtures in 1976 and do some custom pelleting of grass forages and possibly of cereals.

-(cont'd) -

Processed Alfalfa Situation (cont'd)

Current stocks of processed alfalfa are expected to move into the domestic market and clear plant inventories before the new crop is harvested. Mr. Macyk says buyers can expect to pay current prices for processed alfalfa until at least the new crop year. The price for sun-cured pellets is $70 to $75 per ton and the price for dehydrated pellets is $85 to $89 per ton. Cubes are selling between $64 to $70 per ton

American Situation

The current market for dehydrated and sun-cured alfalfa is strong with 1975 U.S. production and stocks down compared with 1974. However, U.S. domestic disappearance is up.

Prices throughout the U.S. have firmed from the seasonal low of $65 per ton for dehydrated alfalfa,basis central U.S.A.,to a current price of nearly $100 a ton. California markets have followed a similar pattern. They have risen from $85 a ton in August to over $110 per ton at the present time.

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CORRECTION The title of the author (Dr. Frank Baker) of the article "Calf Scours" (March 1 issue of "Agri-News") is beef cattle extension veterinarian - not beef cattle extension engineer as stated.

March 8, 1976

FOR IMMEDIATE RELEASE

SERIOUS SOIL DRIFTING IN SOUTH-WESTERN ALBERTA

When soil and high winds get together the result can be disastrous for unprotected soils as many farmers in south-western Alberta have learned to their detriment this winter.

Adolph Goettel, head of Alberta Agriculture's soils branch, reports that serious soil drifting has been going on in the south-western part of the province for several months now and that it could continue for another three months or until spring crops emerge.

Although controlling soil drifting during the winter is not an easy task, Mr. Goettel urges farmers to inspect their fields regularly, as soil conditions change from day to day, and to take emergency measures when necessary.

"The objective of emergency soil drifting control measures", he says, "is to roughen the field by getting soil clods on to the surface. This can best be done by working the exposed or focal points first".

Regardless of whether or not the soil on the whole field is drifting, only cultivate alternate strips across the field so that if necessary, you can work the uncultivated strips the following week or in April or May when there is no frost or moisture in cultivated soil to form clods. Always cultivate the strips so that they run perpendicular to the prevailing wind.

When frozen or moist soil is below drifting surface soil, Mr. Goettel suggests bringing the clods to the surface by removing half to two thirds of the shanks on an ordinary cultivator. An alternative is to remove the large blade on a Noble-type cultivator and replace it with a special chisel point designed for breaking frozen soil.

In the case of sandy, loose soil, Mr. Goettel suggests ridging the soil with a plow or road

-(cont'd)-

grader when possible or spreading manure or straw on the soil surface. The manure or straw will have to be worked into the soil to anchor the material in place.

Mr. Goettel warns that the above suggestions will probably not work under all field conditions. If they do not work for you, contact your agricultural fieldman or district agriculturist for advice.

Farmers in this province are legally responsible under the Alberta Soil Conservation Act for preventing soil drifting on their land. All municipal agricultural fieldmen are soil conservation officers and have the authority to enforce the act. When necessary, they will arrange for remedial measures to be taken and charge the cost to the landowner.

Mr. Goettel urges farmers who live in areas where soil drifting is an ever present threat to think in terms of prevention rather than emergency control measures. "The latter", he says, "is much more satisfactory in the long run".

Long term measures include planting shelterbelts and tall growing grass crops, strip farming and leaving a good trash cover on the fields. Mr. Goettel points out that the high speeds with which cultural operations are being carried out with large, modern tractors is detrimental to both trash cover and soil tilth. He recommends conserving the trash cover even if it means sacrificing some speed. Today's large tractors are also responsible for the strips in strip farming becoming continually wider, and at times too wide to be effective. Cultivated strips on coarse textured soils should not be wider than five rods (80 feet). On medium to fine textured soils they should not be wider than 10 to 16 rods.

March 8, 1976

FOR IMMEDIATE RELEASE

TIME AND MOTION STUDIES AND THE DAIRY INDUSTRY

Dairy farming in North America and Europe has changed from a family farm business to a small factory operation.

This is the opinion of T.A. Preston, professor of agricultural engineering at the University of Alberta, who specializes in time and motion studies. He says, "More time and motion studies have been done on dairy work than on any other farm task".

Recent developments in this area include rotary parlors and computer programs which can help farmers to improve the design of their work routines.

Mr. Preston points out that it is still accepted that 100 minutes is approximately the maximum time that a man can keep up the pace of milking. In the case of herringbone palors which have a one minute work cycle, one man can milk between 40 to 50 cows. Herd sizes of about 120 cows per man are practical with a Roto-tandem or Carousel type milking parlor where the work cycle is just under a minute per cow.

A dairyman who has a Hosier parlor can handle between 600 and 700 cows with a team of shift milkers. The work cycle of this type of parlor is just under a quarter of a minute per cow. The parlor is in the form of a centre-facing rotary herringbone, contains 18 to 22 stalls, centre feeders and an automatic cluster removal mechanism. The operators are outside the parlor.

The following time study data shows the average time and the range of times that it takes to perform the various tasks involved in milking.

-(cont'd)-

Time and Motion Studies and the Dairy Industry (cont'd)

	Average	Range
Let cows in and out and feed	0.2 min.	0.1 - 0.8 min.
Fore milk, wash and dry	0.32	0.1 - 1.2
Attach cluster	0.2	0.15 - 0.25
Inspect and remove cluster	0.15	0.1 - 0.2
Disinfect	0.08	0.06 - 0.12
Contingencies, etc.	0.05	0.0 - 2.0
	1.00 min.	0.51 - 4.57 min.

Mr. Preston explains that the actual time it takes to milk a dairy herd will not be the average every day --- some days will be better than others. "Computer programs", he says, "can now estimate the times needed for milking when various combinations of routines are used and various times are likely or probable. Udder washing, for example, takes longer on a wet day than on a dry one, and in some herds an extra stall for washing may give better returns than an extra milking unit.

A computer can also work out the time required for various improvements by simulating the complications arising from fast and slow milkers, dirty and clean cows, kickers, etc. These complications slow down the actual time required for milking and make averages unrealistic. The computer tries to simulate the real routine for several hundred days.

According to Mr. Preston, time study data compiled in Europe ("Elemental Times for Agriculture") has been accepted by members of the European Economic Community. "Now that there is an agricultural policy and wages are known, the labor cost of producing food is no longer a matter of guesswork in price fixing, but is predictable", he says.

March 8, 1976

FOR IMMEDIATE RELEASE

ALFALFA IN SWINE RATIONS

Alfalfa can be used in breeding stock rations and to a very limited extent in finishing rations, but its high crude fibre level makes it unsuitable for starter rations.

According to Alberta Agriculture's swine nutritionist, Ron Lane, the quality of protein contained in alfalfa is only slightly better than in cereal grain, but dehydrated alfalfa is an excellent source of vitamin A, calcium and riboflavin. However, its most outstanding characteristic is that it contains less than half the digestible energy value of barley. Since it is a low energy source, it can be used when fibre or bulk can be added to a ration. In fact, it is mainly recommended as a ration dilutent to prevent excessive energy intake or weight gain.

Mr. Lane says the level of alfalfa meal that should be used in sow rations depends upon the following three factors:

- Age - the older the sows, gilts or boars, the better their ability to digest alfalfa and the greater the capacity of their digestive tract to take in alfalfa.
- Stage of Development (gestating or lactating) - a gestating sow can use more alfalfa meal in her diet than a lactating sow because the nutrient requirements of the developing piglets are small compared with a sow's normal feed intake. A lactating sow, on the other hand, can use only a small amount of alfalfa meal in her diet because the energy and protein levels of alfalfa meal are not appropriate to meet the demands of high quality milk production.
- Quality of Hay - the poorer the quality of the alfalfa, the smaller the amount that should be included in the diet.

Depending upon the above factors, the ration of boars and gestating sows can probably contain

-(cont'd)-

Alfalfa In Swine Rations (cont'd)

25 to 30 per cent alfalfa meal, but 10 per cent dehydrated alfalfa meal will probably give better [illegible] In fact, the inclusion of alfalfa meal in the ration of group fed dry sows is recommended to prevent [illegible] weight gain. A good general rule for lactating sows would be to feed about one-fifth as much alfalfa meal as is fed to gestating sows.

Growing And Finishing Swine

"Alfalfa" Mr. Lane says, "should not be included in the ration until the pigs are about 75 pounds liveweight. Young pigs have only a limited digestive capacity to utilize roughage and do not digest the fibre in feeds very well". Although older pigs can digest roughage better, alfalfa meal is not recommended for pigs under 125 pounds because of its low energy level. However, it can be used to make up 5 per cent of rations for heavier pigs. If there is a special reason for a low energy intake, it can be used to make up 10 per cent of the ration.

An article published in the University of Alberta's "Feeder's Day Report" (1956) indicates that feeding 10 to 25 per cent dehydrated alfalfa meal in finishing rations was not economical because of poor feed efficiency. However, both levels produced excellent carcass quality. Some pig producers have indicated that the use of alfalfa pellets in growing-finishing rations at the 2.5 per cent level has helped to control tail biting.

There are two main disadvantages to feeding alfalfa meal. Because of its low digestibility, the higher the level in the diet, the greater will be the amount of fecal dry matter produced. Hence, the necessity for more waste management.

An excessive amount of alfalfa meal in the diet will lower the energy content of the diet with the results that more feed will be consumed, the growth rate will be slower and the number of days to market will be greater. The end result could be no savings in total feed costs and /or no increase in total profits.

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Alfalfa in Swine Rations (cont'd)

Following are suggested rations for boars and pregnant sows and for lactating sows.

Rations for Pregnant Sows and Boars - 14 per cent protein

	Ration 1		Ration 2	
	per cent	lbs.	per cent	lbs.
Barley	40	800	80	1600
Oats	40	800	--	--
40 per cent concentrate	10	200	--	--
Alfalfa meal	10	200	10	200
Soybean meal	--	--	7.5	150
Mineral-vitamin premix	--	--	2.5	50

Rations for Lactating Sows - 15 per cent protein

	Ration 1		Ration 2	
	per cent	lbs.	per cent	lbs.
Barley	70	1400	80	1600
Oats	12.5	250	--	--
40 per cent concentrate	12.5	250	--	--
Alfalfa meal	5.0	100	5	100
Soybean meal	--	--	12.5	250
Mineral-vitamin premix	--	--	2.5	50

March 8, 1976

FOR IMMEDIATE RELEASE

GOOD SEED MONTH

Good seed month is here again and here are some good reasons why you should invest in good seed.

First, there are no substitutes for certified seed of the varieties that are recommended for growing in specific areas of Alberta and for specific purposes. Second, the farmer who buys certified seed is assured of a variety that has proved its performance and of seed that meets the highest standards of germination. Third, he is assured that his seed is virtually free of weed seeds and other foreign material. Fourth, and perhaps most important of all, he knows that the seed he gets is the variety he ordered -- not another variety or a mixture of varieties.

Wheat

Sherman Yelland of Alberta Agriculture's plant industry division reports that research carried out in Manitoba showed that pedigreed wheat produced an average yield of 26.9 bushels per acre compared with an average yield of 24.6 bushels per acre for wheat that had been cleaned twice at the elevator and an average yield of only 23.5 bushels per acre for wheat that had been cleaned once at the elevator.

At a price of $3 per bushel, the pedigreed wheat would return $6.90 per acre more than the double-cleaned wheat and $10.20 per acre more than the wheat that was cleaned once. This means that if the pedigreed seed cost $5 per acre more than the home grown seed, it could double the investment.

Expressed another way, a 100-acre field of pedigreed wheat could return $500 above the extra cost of the seed.

Barley

Mr. Yelland also points out that pedigreed seed barley usually gives higher yields than com-

-(cont'd)-

Good Seed Month (cont'd)

mercial barley because it is more likely to be free of diseases and the kernels are generally larger.

In tests carried out at the federal research station at Saskatoon, for example, the crop grown from large kernel barley contained only 3.2 per cent loose smut compared with 8.1 per cent in the crop grown from medium-sized seed and 13 per cent in the crop grown from small kernels. The seed from diseased plants is usually smaller than the seed from non-diseased crops because of the infection.

Yield data obtained from a test conducted at the federal research station at Lacombe show that large kernel barley seed produced 76.7 bushels per acre, bin run barley produced 68.1 bushels per acre and small seed barley produced only 56.1 bushels per acre.

If the price of barley were $1.80 per bushel, the crop from the large seed would be worth $15.50 per acre more than the crop from the bin run bulk seed. This suggests that a farmer with good quality seed could get an extra $1,500 from a 100-acre field by having 60 per cent of the kernels removed at the seed cleaning plant instead of the usual 15 per cent. The only extra cost would be an additional 80 bushels of screenings and the cost of cleaning 80 additional bushels of grain. The total cost would be about $150, but since the screenings would be worth at least $75 for feed, the net cost would be only $75.

Oats

In a test carried out by Alberta Agriculture it was found that registered Garry oats yielded 74.3 bushels per acre compared with only 64 bushels per acre for commercial Garry seed in the same field.

If the price of oats were $1.20 per bushel, the difference in the return from the two seed lots would be $12.36 per acre in favor of the registered seed. If the registered seed cost $6 an acre, the return would be about $2 per acre for every extra dollar invested in registered seed.

March 8, 1976

FOR IMMEDIATE RELEASE

MAKING YOGURT AT HOME

by Jan Williams-Russell
Alberta Agriculture's District Home Economist at Stettler

Yogurt has recently achieved widespread popularity and acceptance as a nutritious food.

It is a cultured milk product that has a mildly acid flavor and is made by innoculating milk with a mixed culture of lactic bacteria and then letting it ferment. During the fermentation period the milk changes into the thick custard-like product that is known as yogurt.

The nutritive value of yogurt is almost the same as that of the milk from which it is made. It is a good source of calcium, protein and riboflavin. However, because it is usually made from partially skimmed milk with added nonfat solids, it is lower than whole milk in fat, calories and vitamin A.

In addition to being used as a snack or dessert, plain yogurt can be used instead of sour cream or salad dressing on chopped vegetables, in cream sauces and as a marinade for meats.

Method for Making Yogurt

Milk in any form can be used to make yogurt. It can be pasteurized whole milk, 2 per cent milk, skimmed milk, powdered milk mixed with water, evaporated milk or any combination of these.

An inexpensive combination is one part evaporated milk to 3 parts milk made from powdered skim milk and water. Do not use unpasteurized milk.

You can use a container of plain commercial yogurt for your yogurt culture or a package of culture from a specialty store.

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Making Yogurt at Home (cont'd)

To make the yogurt use 3 tablespoonsful of commercial yogurt to 1 quart of milk or one teaspoonful of the culture per quart of milk.

Heat the milk to 180° F. and then cool it to 110° F. Stir the culture into the milk and pour the mixture into a glass or ceramic container with a cover leaving a space at the top. Put the jar into a water bath in a cool oven (115° F.). Be careful not to jostle the yogurt while it is growing! Check it in seven to eight hours to see if the contents have reached a thick, custardy consistency. If not, check every half hour. Refrigerate the yogurt when it is ready. It will keep for about a week.

Keep a small quantity of yogurt from your first batch to use as a starter for a second batch. Preferably, the starter should not be older than five days when used for the next batch.

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FOR IMMEDIATE RELEASE

FINANCIAL CONTROLLER APPOINTED TO AGRICULTURAL DEVELOPMENT CORPORATION

Lorne Ordze, chairman of the board of directors and director of the Agricultural Development Corporation (ADC) has announced the appointment of John Orr to the position of financial controller with the corporation.

As financial controller, Mr. Orr will be responsible for providing the corporation and board of directors with the necessary accounting information required to make policy decisions. He will also implement internal audit procedures; assist in the redesign of internal systems, including accounting systems, and develop new data processing systems.

Mr. Orr is a chartered accountant with varied experience covering the full spectrum of financial management of crown corporations and government departments. His experience includes long range planning, estimate preparation, auditing and financial recording and reporting for all elements of a corporate enterprise. In this capacity, he delt with mortgages, payables, pay roll, inventory, expenditure control, etc. He also has extensive experience in design, development, implementation and operation of financial systems for both computer and mechanical systems.

This experience has been derived through working for the Ministry of Housing, and the Department of Municipal Affairs in Ontario; the Canadian Broadcasting Corporation; the federal government's treasury board; Canadian General Electric and the Department of National Revenue.

With this extensive experience and his rural Ontario background, Mr. Orr will be a valuable addition to the ADC management team.

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March 15, 1976

FOR IMMEDIATE RELEASE

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March 15, 1976

FOR IMMEDIATE RELEASE

PREDATORS AND POULTRY

Alberta Agriculture's Predator Indemnity Committee received more than 50 claims last year for poultry losses allegedly due to predators.

Dr. G.R. Whenham, committee chairman, says predators listed on the claims forms included wolves, coyotes, weasels, foxes, lynx, mink, skunks, owls and dogs. Coyotes headed the list for both total number of claims and total reported losses.

Dr. Whenham says "The greatest losses appear to occur among chickens that are allowed to roam free in the barnyard, especially when they are not confined at night. Coyotes usually come into the yard at dawn and take away the chickens, one at a time, leaving only a few feathers as evidence of their visit. This ritual frequently goes on for weeks before the farmer is even aware that his flock is being depleted".

When a predator attack occurs in confined poultry, the culprit is usually a weasel, a mink or a skunk. However, in at least one reported case, a lynx had entered the poultry house through a window that had been left open for ventilation.

According to Dr. Whenham, the Predator Indemnity Committee usually pays indemnity claims for birds which are killed inside a building or inside an enclosed run, but rejects claims for birds killed while running at large. "The committee feels," he says, "allowing chickens to run at large constitutes bad management. Such a claimant should not be eligible for indemnity".

March 15, 1976

FOR IMMEDIATE RELEASE

RAPESEED NITROGEN REQUIREMENTS

Although it is true that rapeseed usually responds to high nitrogen fertilizer levels, some of the information outlining the need for high rates may be misleading.

Statements have appeared recommending that 120 pounds of nitrogen per acre be applied to rapeseed and mustard grown on non-summerfallow land. Doug Penney, Alberta Agriculture's soil specialist, reports that research trials have sometimes shown economical responses to this rate and to higher rates. He emphasizes, however, that 120 pounds per acre is not generally recommended. "An economic response to 120 pounds of nitrogen per acre only occurs when available nitrogen in the soil is very low and when the price of rapeseed is reasonably high", he says. "High rates of nitrogen should be applied only when a soil test indicates that they are needed."

An evaluation of soil test results on summerfallow land over the past 12 years has shown that rapeseed grown on summerfallow would benefit from a nitrogen fertilizer about 50 per cent of the time. It has also shown that the percentage of summerfallow that will respond to nitrogen varies greatly from one year to another. In a number of central and northern Alberta locations, for example, the percentage of summerfallow samples deficient in nitrogen has ranged from 20 to 90 per cent, depending upon such things as rainfall, temperature, and weed growth during the fallow year.

When nitrogen fertilizer is applied to a fallow field that is low in available nitrogen, the economic returns are usually good. However, when nitrogen is applied to a fallow field that has a high available nitrogen content, the response does not justify the expense. Hence, the importance of basing nitrogen fertilizer applications on soil test results.

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Rapeseed Nitrogen Requirements (cont'd)

Mr. Penney also points out that the relationship between crop and fertilizer prices is a major factor in determining the rate of fertilizer that is economical to apply. "In the past, rapeseed has generally shown a somewhat higher return from nitrogen fertilizer than cereal crops, but this is not the case at the present time," he says.

The following table compares the net returns from fertilizer on barley and rapeseed crops in 1971 and in 1975.

		Price Per Bu.	X	Yield Increase *	=	Value of Increased Yield	-	Fertilizer Cost **	=	Net Return
Barley	1975	$2.25	X	20.0	=	$45.00	-	$13.00	=	$32.00
	1971	0.65	X	20.0	=	13.00	-	8.00	=	5.00
Rapeseed	1975	5.70	X	8.6	=	45.60	-	13.00	=	32.60
	1971	2.25	X	8.0	=	18.00	-	8.00	=	10.00

* From 50 lb N/ac and 25 lb P_2O_5/ac

** 50 lb N/ac, 25 lb P_2O_5/ac

The two important points that emerge from this table are that net returns from fertilizer on both barley and rapeseed were much higher in 1975 than they were in 1971, and that the net returns from both crops were similar in 1975. In 1971 they were twice as high for rapeseed as they were for barley.

March 15, 1976

FOR IMMEDIATE RELEASE

EFFECT OF SEEDING RATE ON BARLEY

Farmers are advised to test the effect of various recommended seeding rates for all the major barley varieties under their local conditions.

Sherman Yelland, Alberta Agriculture's cereal and oilseed crops specialist reports, "Research has shown that results obtained from various barley seeding rates vary widely according to the variety, the region, the depth of seeding and the seeding date."

Agriculture Canada scientists who tested Olli, Conquest and Parkland barley over a two-year period at Beaverlodge, Fort Vermilion and Fort Simpson in the Northwest Territories found the greatest yield differences among the varieties occurred at the low end of the seeding rate, and that the least difference occurred at the high end. The rates used were 0.5, 1.0, 2.0 and 4.0 bushels per acre, and the rows were six inches apart.

Olli responded poorly to the low seeding rates but Parkland responded well. Olli and Conquest both yielded best when seeded at a rate of 2 bushels per acre, while Parkland produced the highest average yield at a seeding rate of one bushel per acre.

Test results also showed that increases in seeding rates reduced the days to maturity. Their effect was greatest on the maturity of Olli, and similar for both Conquest and Parkland. The greatest difference between two adjacent seeding rates in all three varieties occured between the one and 2-bushel per acre rate.

The scientists also found that decreases in seeding rate increased seed size. The seed size of Olli increased most when the seeding rate was reduced to the lowest level, but showed the least

-(cont'd)-

Effect of Seeding Rate on Barley (cont'd)

difference between the two intermediate rates (one and 2 bushels per acre).

On the other hand, Conquest and Parkland showed a considerable difference in seed size between the two intermediate seeding rates. However, there was a consistent reduction in seed size for all varieties when they were seeded at the highest seeding rate.

None of the varieties showed significant or consistent differences in bushel weight, but increases in seeding rate reduced plant height. On the average, the height of Parkland was most affected by the seeding rate.

The scientists feel that the reduction in the height of Olli and Parkland that occured between the 0.5 bushel per acre seeding rate and the 2 bushel rate may have important implications for reducing lodging under certain conditions.

Agriculture Canada research results suggest that a seeding rate of around 2 bushels per acre gives the best combination of yield and maturity for Olli and Conquest barley in northern areas. Higher rates can reduce time to maturity, but will require a higher seed outlay and, as a general rule, will reduce seed size and yield.

Parkland, on the other hand, usually produced 100 pounds per acre more at the one bushel per acre seeding rate than it did at the 2 bushel per acre seeding rate, and matured only a day later.

March 15, 1976

FOR IMMEDIATE RELEASE

DEVELOPING A WELL FROM WATER SATURATED SAND

Do you have a bored well which has 'sanded in' or a layer of water saturated sand that is close to the soil surface? If you have either of these situations, you probably have a potential supply of water that can be easily and inexpensively developed.

Ken Williamson of Alberta Agriculture's engineering and home desing branch says a continuous-slot well point can be used to develop a water supply in both cases. A continuous-slot well point consists of triangular-shaped wire welded around a skeleton of longitudinal rods. When it is driven into the sand, the slot openings (gaps) between the turns of wire on the longitudinal rods allow the water to enter the casing and keep back most of the sand.

For the proper development of the well, the slot openings should allow some sand to wash through the well point screen. When this fine sand is pumped out of the well it leaves a layer of coarser sand around the screen which holds the finer material back. Slot openings vary in size from 0.006" to 0.25". According to Mr. Williamson 0.010" and 0.012" are commonly used sizes. Analysis of a representative sand sample will determine the correct slot opening for a given situation.

If a greater volume of water is required than that provided by a single well point, several other well points can be driven into the saturated sand some distance from the original site and all connected to the same pump.

More detailed information on using continuous-slot well points can be obtained from one of Alberta Agriculture's engineering technologists. They can be contacted through your district agriculturist.

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FOR IMMEDIATE RELEASE

CERTIFIED FORAGE SEED

A farmer who buys certified forage seed is guaranteed by the pedigreed seed production system that he is getting a variety that has proven its performance and that the seed meets the highest standards of purity and germinating ability.

Larry Gareau, forage crops specialist with Alberta Agriculture, points out that a farmer who buys commercial seed has no such guarantee. "The seed he gets will usually have come from a high yielding type of forage, but will not necessarily have a high forage yielding ability or hardiness," he says. "In fact, it may not even be suited to the area in which it is to be grown".

The advantages of planting pedigreed forage seed are obvious to pedigreed seed producers, but large quantities of non-pedigreed seed are still being planted in Alberta with the mistaken idea that cheaper seed saves money.

According to Mr. Gareau, commercial forage seed grades allow a considerable percentage of other crop seeds and weed seeds, and often contain mixtures of inferior seed because of the restrictions on selling non-pedigreed seed on foreign markets. "The resultant lower yields, lower quality forage and more expensive weed control can hardly be expected to save money," he says.

It is true that the advantages of planting certified forage seed of recommended legume and grass varieties are not always as obvious as they are for cereal and other crops. However, trials carried out at the federal research station at Lethbridge have shown conclusively that the advantages derived from certified seed are just as great in forage crops as they are in other crops. The superiority of certified forage seed varieties over other varieties in yield, disease resistance and other characteristics has been proved and carefully documented.

-(cont'd)-

Certified Forage Seed (cont'd)

Dr. R.M. Hanna, forage breeder at the research station at Lethbridge, points out that the varietal blends of various alfalfa varieties being promoted by some companies offer no guarantee of the varietal content of these mixtures. He explains that the seed lot that a farmer buys today may be entirely different to the one he buys tomorrow even though both have the same brand name. He also says that research to date has generally shown that single variety forage stands are more productive than blends.

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March 15, 1976

FOR IMMEDIATE RELEASE

FARMING ON ACID SOIL

The best thing you can do if you suspect that your soil is acidic is to have it tested this spring.

A soil is acid when the pH value is below 7.0 (it is alkaline when it is above 7.0). However, in practice, soils with a pH value between 6.5 and 7.5 are considered neutral.

A low pH value affects the growth of alfalfa by reducing nodulation which, in turn, reduces the yield. Also a soil with a pH below 5.6 may contain soluble aluminum in sufficient quantities to be toxic to crops.

One way of coping with an acid soil is to grow acid tolerant crops. Cereal and oilseed crops vary greatly in their tolerance to soil acidity. Oats, for example, are very tolerant, while wheat and rapeseed are moderately tolerant. Barley is the least tolerant. Red clover and grasses are more tolerant to soil acidity than alfalfa and sweet clover.

Another way of managing an acid soil is to neutralize it with an application of lime. Lime costs about $20 per ton. Although the initial cost is relatively high, it should be remembered that the benefit from a single application will probably last at least 10 years.

The amount of lime needed varies with the soil pH, the organic matter content and the clay content. Between one and 2 tons per acre is a common application rate. However, the field should be carefully sampled to establish the correct rate and to ensure that the lime is applied to areas that need it most.

Lime can be applied any time the ground is hard enough to support a tractor or truck and should be worked in to a depth of at least four or five inches.

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March 15, 1976

FOR IMMEDIATE RELEASE

ATTRACTING AND KEEPING A GOOD FARM WORKER

Do you have trouble attracting good farm workers or in keeping a good worker? Here are a number of ways, recommended by Alberta Agriculture, for overcoming these problems.

- Have a written contract which covers wages; holidays; time off; fringe benefits; accommodation; overtime, if applicable, and anything else that is important to either of you. A written contract will eliminate any chance of misunderstanding and protect you and your employee.

- Pay a competitive wage, and if you have a good year, consider paying a bonus for good work. A person may want to work on a farm and be very good at this work, but if he has to be content with a low standard of living for himself or his family, the chances are he will seek a better paying job in industry.

- Provide adequate housing. You need good housing, particularly for married couples if you are to attract skilled, capable help that can operate complex machinery and care for valuable livestock.

- Offer a certain amount of paid vacation time. Two weeks a year should be considered a minimum. An employee who is hired on a short-time basis should receive a percentage of his salary as vacation pay. Four per cent of wages earned is recommended.

Extras such as garden space and the opportunity to keep a cow, pigs or chickens are other fringe benefits which are very attractive, particularly to a married couple.

- Ask for ideas. A good farm worker is an intelligent person doing a job because he likes to do it. He will be more interested in his work if he knows that his ideas are welcomed, and he may come up with an idea that will save you time and money.

- Give your employee responsibility. Once he understands some part of your operation thoroughly and demonstrated his competence, let him run it. An employee who has been delegated responsibility has a stake

-(cont'd)-

Attracting and Keeping a Good Farm Worker (cont'd)

in the job and will do his best. He will have a better job, and you will have more time for other things.

- Provide for adequate time off. Nobody wants to be tied down 24 hours a day for seven days a week. A farm worker should have at least every other weekend off and days during the week in lieu of weekends worked.
- Provide training. A well taught worker is more valuable to you and more satisfied with himself. Teach him to run heavy machinery or arrange for him to take agricultural short courses.
- Share the good and the 'not-so-good' jobs. No employee will stay long on a farm where he always gets the undesirable jobs to do. Give him jobs that allow him to see the result of his work.

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March 15, 1976

FOR IMMEDIATE RELEASE

REGIONAL DIRECTOR APPOINTED TO FAIRVIEW

Alberta Agriculture's extension director, John G. Calpas, has announced the appointment of Douglas MacKenzie to the position of regional director at Fairview. Mr. MacKenzie replaces Al Reimer who assumed the responsibilities of regional director at Calgary earlier this year.

As regional director, Mr. MacKenzie will be responsible for co-ordinating regional program development and extension work in the Peace River region. In co-operation with regional specialists in Fairview, he will direct and supervise an extension force of some 40 departmental staff working out of 11 district offices.

Mr. MacKenzie will play a leading role in integrating the activities of Alberta Agriculture, local government, agri-business and non-agricultural sector agencies in matters that pertain to agriculture.

A native of Camrose, Mr. MacKenzie attended Montana State University, U.S.A.and obtained a B.Sc. in agriculture in 1968, having specialized in animal science. In 1970 he obtained a M.Sc. in agriculture from the North Dakota State University, U.S.A.

Mr. MacKenzie joined Alberta Agriculture in 1968 as an asssistant district agriculturist. He was initially located at Stettler and later moved to Lacombe where he remained until returning to university. In 1970 he joined Alberta Agriculture's communications' branch where he remained until his appointment as district agriculturist at Calgary in 1972. He retained that position until his present appointment.

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Alberta
AGRICULTURE
COMMUNICATIONS

FOR IMMEDIATE RELEASE

MEXICAN DAIRY HEIFER REPLACEMENT PROGRAM

Replacement heifers being reared at a rural development bank dairy farm in Mexico.

Mexican farmers, like their Albertan counterparts, are finding it hard to raise replacement heifers for their dairy herds.

Here is how they are coping with the problem as reported by Heinz Schulz. Mr. Schulz, presently working for Alberta Agriculture, went to Mexico as an interpreter for the Alberta All Breeds Association. While there he attended the Guadalajara Dairy and Beef show in Guadalujara in central Mexico where various Alberta breeds were being exhibited. He then toured dairy and beef cattle enterprises in that part of the country.

Mr. Schulz reports that one of the rural development banks in Mexico sponsors a program whereby their personnel go round dairy farms in the Mexico City milkshed and buy up two-day old

-(cont'd)-

dairy heifers. Most of these animals, which cost about $20, are registered, all are sired by an artificial insemination (A.I.) bull and all have dams with milk production records.

The heifers are taken to the bank's dairy farm which can accommodate 1,200 head of all ages. Here the animals are ear tagged, and the information on their sires and dams is filed away for future reference.

The heifers are kept in individual pens in an air-conditioned building for the first two months. The pens have slatted floors and are frequently disinfected to keep down the incidence of disease, especially scours. According to Mr. Schulz, death losses are extremely low compared with losses in calves kept under ordinary barn conditions in either Mexico or here.

When the heifers are two months old they are put outside in feedlot type corrals which hold 50 head. Each group is fed according to the age of the animals.

Since this dairy farm, like many others in the area, has no land, the feed is bought from local farmers. It includes green alfalfa; corn silage, which makes up the bulk of the rations, and concentrates.

The heifers are bred by A.I. and kept on the farm until a month before they are due to calve. At this time the manager notifies the original owner of the heifer and gives him a chance to buy her back. If he is not interested, the heifer is sold to a dairy farm in the area. Mr. Schulz says there is always a long waiting list for these animals which sell for an average price of $600 a head.

Feed costs are very high in Mexico. Corn silage, for example, costs approximately twice what it does in southern Alberta. Hence, the bank aims only at breaking even on its heifers. "The idea behind the bank's dairy replacement program is to provide its customers with a service", Mr. Schulz explains. "A breakeven price of $600 is only possible in a country like Mexico where labor is very cheap."

-(cont'd)-

Mexican Dairy Heifer Replacement Program (cont'd)

Dairy Bull Program

Under this program the Mexican department of agriculture buys Holstein bull calves, which would otherwise be slaughtered, from high milk producing cows on the better dairy farms in central Mexico. The government buys them at about two days old and pays around $10 a head.

The bull calves are reared under the same conditions as the heifers mentioned above. When they reach breeding age, they are sold to local dairy farmers for approximately $200 a head.

To be eligible for one of these bulls, an applicant must agree to adopt government approved standard of management for the bull and the cow herd. Periodic inspections are made to ensure that he keeps his part of the bargain.

The government's purpose in subsidizing dairy bulls so heavily is to up-grade the native cattle in Mexico by crossing them with Holstein bulls. The native Criollo and Zebu cattle are resistant to heat and ticks but are very low in milk production. The government hopes that the crossbreds that result from their program will combine heat and tick resistance with a higher level of milk production.

"The program", says Mr. Schulz, " represents a sound idea. It would not be feasible for these dairy farmers to use a purebred Holstein bull because of the specialized management (feed, shade, etc.) that they require in this part of Mexico."

Mr. Schulz points out that A.I. cannot be used in many parts of Mexico because of the lack of communication and transportation.

The Mexican dairy bull program, which is under the direction of a female veterinarian, is extremely popular, according to Mr. Schulz. He says, "The demand for these bulls is always much greater than the supply".

March 22, 1976

FOR IMMEDIATE RELEASE

CANADIAN GRAIN EXPORTS TO SOVIET UNION

by David Walker
Marketing Analyst, Alberta Agriculture

Recent grain market developments suggest that we can continue to expect the Soviet Union to be a substantial but irregular customer for Canadian wheat.

If Canada is to take full advantage of the Soviet market, it will be necessary in years when Soviet needs are substantial to have carryover stocks in addition to harvest supplies and to have adequate transportation facilities to get the extra grain to Canadian ports.

The Soviet's tenth five year plan, political repercussions from last summer's U.S./Soviet grain sales and the resultant five year grain deal between those two countries will have a significant impact on Canadian sales prospects to the Soviet Union during the next five years.

It now appears that doing business with the Soviet Union is not as straight-forward for the Americans as had been supposed. The politically motivated U.S. long-shoremen's loading boycott of grain vessels destined for the Soviet Union last summer highlighted the fact that U.S./Soviet grain sales are a politically sensitive issue in times of inflation if they result in substantial advances in grain prices, as they have done in the past.

The problem for the Soviets appears to be that of dealing with the U.S. public as much as with the U.S. grain trade. Under our system in Canada, however, the Canadian Wheat Board can provide an effective buffer between politics and commerce. Prices of milling wheat sold for domestic human consumption are legislated and we have no 'big board' to inform the public of rising grain prices and to forewarn of possible impending increases in retail food prices.

While Canada will not again dominate the Soviet grain trade as was the case in the past, the above factors may limit U.S. participation. Limits will tend to be set by the five-year U.S./Soviet grain deal that provides for unrestricted grain trade between the two countries for a minimum of 6 and a maximum of 8 million tonnes per year. Soviet purchases of U.S. grain in excess of 8 million tonnes will

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require the approval of the U.S. government and the implied approval of the U.S. public.

Thus in a year when import requirements are less than 6 million tonnes, the Soviets are likely to favor grain purchases from the U.S.. However, when their requirements exceed 6 million tonnes, they will rely more heavily upon other sources as their requirements increase . They will tend to clean out the granaries of other grain-exporting countries before going to the U.S. 'public' for approval of purchases of U.S. grain in excess of 8 million tonnes.

Over the last 10 years Soviet purchases have averaged only about 5.9 million tonnes. However, imports during the Soviet's ninth five-year plan, which commenced during the 1971 -72 crop year, are likely to average about 14 million tonnes. This dramatic increase is a result of poor harvests and ambitious plans for meat production in the Soviet Union.

The tenth five-year plan, currently being considered by the Soviets, is ambitious but because of recent 'short falls' it does not include as substantial increases as the ninth plan.

The new plan calls for the production of from 215 to 220 million tonnes of grain, which is about 20 per cent higher than the 1971 to 1975 average production. The plan also calls for a 14 million tonne level of meat consumption, 16 per cent higher than that of the past five-years.

The outcome of livestock breeding plans are likely to be more certain than those for grain seeding because the weather has a smaller impact on livestock production than on grain production. In years of poor harvests the Soviets will have to continue to import substantial quantities of grain for their livestock.

All this suggests that the Western world can anticipate a grain market in the Soviet Union that will be similar in volume to that experienced over the last five years. Such a market would be about equal to Soviet exports to East European countries, or about 5 million tonnes, in good grain producing years; and equivalent to the 'short fall' in Soviet production, up to the limit of their port capacity, in poor crop years.

In view of the above, during the next five years Canada can probably expect two years of very limited grain sales, two years of substantial business and a year when Soviet demand will exceed our capacity to supply. The implication is that we should not be unduly concerned about the accumulation of grain stocks during the off-years, providing that we have the ability to move them in years when the Soviets need them.

March 22, 1976

FOR IMMEDIATE RELEASE

COW HERD ADJUSTMENT

This year is expected to be another year of cow herd adjustment.

The head of Alberta Agriculture's market analysis branch, Jim Dawson, believes the extent of the adjustment will depend mainly upon world feed grain markets this fall. However, he does not anticipate that cow and heifer slaughter will be as high as it was last year.

"Providing cattle prices and feed costs can strike a balance as they seem to be approaching now, it is quite possible that by 1978 the beef cow herd will be experiencing the beginning of another expansion phase", he says.

Last year was the first full year of herd adjustment in Canada. Although the historic pattern of the cattle cycle is not a definite enough phenomenon to use as a forecast base, past contraction phases have resulted in some decline in the total cattle inventory. However, there has seldom been a notable reduction in the beef cow population.

In 1968 the dairy and beef cow population increased from 5,456,000 head to a record high of 6,508,000 in 1975, representing a 19 per cent increase. However, since the dairy cow population declined during this period by nearly 15 per cent, the beef cow population actually increased by 47 per cent.

Even though cow numbers were up in mid-1975, the cattle industry was well into the contraction phase of the cycle. In Canada the adjustment began in late 1974 when rising feed costs began to pressure the feeder cattle market and extensive cow culling and heifer slaughter got underway.

Last year Canadian cow slaughter exceeded the 1974 level by 32 per cent or by about 193,000 head. In addition over 100,000 cows were exported to U.S. packers. Heifer slaughter in 1975 was up nearly 33 per cent or by 214,000 head compared with the 1974 volume.

The January 1976 cattle survey for Canada indicated a 2 per cent decrease in the Canadian cattle and calf inventory. The beef cow population was down 4 per cent and the number of

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Cow Herd Adjustment (cont'd)

beef heifers kept for breeding was down 17 per cent. "This adjustment", Mr. Dawson says, "will mean that this year's calf crop will show a decrease, the first decrease since 1969".

He believes the duration of the present contraction phase in the cattle population will depend upon which of the following factors changes first. Will there be a considerable reduction in the beef supply or a reduction in 'input' costs at the feedlot level? Or will there be a sudden acceptance of higher beef prices on the part of consumers?

Mr. Dawson rules out the third factor in view of the state of the Canadian and American economies. "Although gradual price increases have been accepted by consumers, any prolonged price upsurge would dampen the demand for beef", he says. In his view it is likely to be a combination of a reduction in the 1977 beef supply and a reduction in 'input' costs at the feedlot level in 1976 that will bring an end to the present contractual phase in the beef cattle industry.

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March 22, 1976

FOR IMMEDIATE RELEASE

ALBERTA DAIRY POSITION

Creamery butter and factory cheese production in Alberta was up considerably at the beginning of this year compared with the beginning of 1975, but ice cream mix production was down slightly.

The following figures were released by Alberta Agriculture's dairy division.

Butter

Alberta creamery butter production for January was 1,375,000 pounds, an increase of 16 per cent compared with January 1975. Production was up by 30 per cent in the northern region of the province, by 2 per cent in the west-central region, by 24 per cent in the east-central region and by 13 per cent in the southern region.

Canada creamery butter production was 16,710,000 pounds in January, representing an increase of 34 per cent over a year earlier.

Canada creamery butter stocks on February 1 of this year were 73,982,000 pounds, an increase of 81 per cent over February 1, 1975.

Cheese

Alberta factory cheese production for January was 793,000 pounds, an increase of 32 per cent over the same month in 1975. Alberta cheddar cheese production was 557,000 pounds, representing a 36 per cent increase over January 1975.

Canada cheddar cheese production in January was 14,394,000 pounds, an increase of 15 per cent compared with January 1975.

- (cont'd) -

Alberta Dairy Position (cont'd)

Ice Cream Mix

Alberta ice cream mix production for January was 210,000 gallons, a decrease of 2 per cent compared with January 1975.

Canada ice cream mix production was 2,020,000 gallons, an increase of 9 per cent compared with January 1975.

Fluid Milk Sales

Alberta fluid milk sales during November 1975 (the latest figures available) were 11,595,000 quarts, representing a decrease of 3 per cent compared with the same month a year earlier.

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March 22, 1976

FOR IMMEDIATE RELEASE

REMOVING IRON FROM WATER

If your bathroom fixtures and laundry have reddish-brown stains, you probably have iron in your water.

According to Ken Williamson of Alberta Agriculture's engineering and home design branch, there are several methods by which this problem can be overcome. If, for example, the level of iron in your water is less than three ppm (parts per million) you can use a water softener, which will do two jobs at once if your water is hard. However, when using this method of iron removal, you must clean the resin in the softener regularly with sodium hydrosulfite because the rust particles (oxydized iron) tend to clog and foul the resin.

The chlorination and filtration system is a very successful system for removing almost any level of iron from water. In it, the chlorine oxidizes the iron and the sand or carbon filter removes the rust particles.

The manganese-greensand filter is another iron removal device that can be used for iron concentrations of up to about 8 ppm. The potassium permanganate coating on the manganese-greensand oxidizes the iron which is then filtered out by the greensand. Anyone using this method must have a water system that is capable of a water flow of six gallons per minute to backwash the greensand and regenerate the filter bed.

Mr. Williamson points out that there is one iron problem that is caused by an iron bacteria infestation. Although these bacteria do not present a health hazard, they can clog pipes and valves and make the water unpalatable.

The way to tell whether your iron problem is being caused by iron bacteria is to look inside your toilet tank. If there is a slimy red deposit inside the tank, you have iron bacteria.

- (cont'd)

Removing Iron From Water (cont'd)

Shock chlorination is the recommended method for controlling an iron bacteria infestation. Pour three to five gallons of chlorine bleach in 50-100 gallons of water, (depending on the depth of the well) directly into the well and pump some of it through the complete water system. Leave it in the well and in the water system for at least 12 hours. Flush it out by pumping water out of the well and running the taps until the chlorine smell has disappeared. "Shock chlorination," says Mr. Williamson, "will not solve the problem permanently, but it will usually keep the bacteria in check."

You can find out the iron level in your water by contacting your regional agricultural engineering technologist through your distrct agriculturists. If you want a complete water analysis, you should take a water sample to your local health unit office.

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March 22, 1976

FOR IMMEDIATE RELEASE

INTERNATIONAL PLANT PROTECTION CONGRESS IN MOSCOW

by Joe Gurba
Alberta Agriculture's representative at the Moscow Congress

The use of agricultural chemicals on cereal crops is evidentally just as essential to the advancement of socialistic agriculture as it is to Western agriculture.

Over 250 million acres of crop land in the Soviet Union are treated each year with agricultural chemicals to control insects, weeds and diseases.

In the years 1968 to 1972, chemical control of major crop pests prevented a loss of $6.8 to $8.1 billion which represented between 11.7 to 14.4 per cent of the Soviet's gross agricultural output. In addition, chemical 'weeding' saved $420 to $700 million worth of manpower. The profitability rate here was in excess of 500 per cent.

In 1973, the use of agricultural chemicals yielded an additional 22 million tons of grain, 10.7 million tons of potatoes, 14.7 million tons of sugar beets, 1.5 million tons of raw cotton and other products to a total value of $8.4 billion. Herbicides were responsible for $750 million of revenue as a result of reduced manpower.

Total savings in crop losses in the Soviet Union from 1976 to 1980 are expected to come close to $12.6 billion in terms of farm crop yields and $1.4 billion in terms of labor.

The benefit-cost ratio in the Soviet Union's plant protection industry will show a decline owing to higher production costs of new preparations. Hence, attention will need to be given to determining the expediency of chemical treatments and to ensure their high economic effect through the extensive introduction of crop protection methods and techniques.

March 22, 1976

FOR IMMEDIATE RELEASE

FIFTY EIGHT LAMBS FROM SEVENTEEN EWES

A lambing percentage of nearly 350 has been achieved by a small flock of hybrid ewes at an English research station.

According to information received by Alberta Agriculture, the 17 ewes at the Liverpool University Veterinary School's field station have produced 58 lambs this year. Each ewe reared twins and 24 other lambs were reared on a proprietory milk replacer. The milk replacer has a fat content of 30 per cent to simulate the rich milk of a ewe.

The British report says that the Liverpool flock is one of several in that country which are being used in an experimental breeding program that was designed by Professor John Owen of Aberdeen University. The program was introduced 10 years ago when Professor Owen was lecturing in animal production at Cambridge University.

Beginning with a highly-selected group of ewes, mainly Clun Forest, but including such breeds as Kerry Hill, Llyn, Llanwenog, Radnor and Ryeland, Professor Owen has now developed a hybrid strain, known as the "Cambridge' which has proved to be far more prolific than any of the traditional breeds, the report says.

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March 22, 1976

FOR IMMEDIATE RELEASE

CERTIFIED RAPESEED

Why grow certified rapeseed?

There are many reasons for growing certified rapeseed. One of them is that it is your only guarantee that you are planting a named variety. In recent years a number of new varieties have been developed that produce an oil which is low in erucic acid. One of these, an Argentine type called Tower, also produces a meal that is low in glucosinolate. This low level of glucosinolate allows greater use of the meal in livestock rations.

Sherman Yelland, cereal and oilseed crops specialist with Alberta Agriculture, points out that the erucic acid content of rapeseed produced in Canada has become a very important factor because the domestic market will no longer accept rapeseed which has an erucic acid content of over 5 per cent. Many foreign markets also specify that they will take only rapeseed with a low erucic acid content.

A farmer who plants certified rapeseed knows that its erucic acid level is no higher than 1.8 per cent. Certification also means that the seed has been inspected in the field and at the time the bag is sealed to make sure it is free of cleavers and wild mustard. Rapeseed with 2 per cent cleavers and over 5 per cent wild mustard will be discounted at the elevator.

Certified rapeseed also has a high germination level and a high genetic purity. Some varieties perform better in one area than another.

"All this protection," Mr. Yelland says, "comes with certified rapeseed for which your additional cost is about 50¢ an acre --- a small price to pay for so much protection."

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March 22, 1976

FOR IMMEDIATE RELEASE

HOME GERMINATION TEST

Here is an idea for a home grain germination test suggested by Alberta Agriculture's pure seed technician, Lydia Erickson.

Soak a clean dishcloth or piece of white paper towelling in water. Squeeze out the excess moisture and lay 100 kernels of the grain you want to test evenly near the middle of the cloth or paper. When counting out the kernels take them from a good representative sample and do not pick out just the good looking kernels -- include broken ones that are half or greater than half the size of the normal kernels. Next, roll the cloth or paper into a fairly firm roll and tie it loosely with string.

Place the roll in a clean quart sealer and put the glass top on the sealer (do not use a rubber ring). Then put the jar on a shelf in a kitchen cupboard (do not put it in a window). Check the jar every few days to make sure the cloth or paper is still damp.

Each type of grain has a different germination time. The germination period for wheat, oats and barley is 12 days, for rapeseed it is 10 days and for flax it is seven days. At the end of the appropriate time, count only those kernels that have developed a good root and sprout. Number 1 seed should germinate 85 per cent or better.

Although this home test will give a fairly good indication of germination, it cannot be used by anyone who wants to sell his grain for seed. In that case he must obtain a germination and grade certificate from the Plant Products Division, 873 Federal Public Building, 9820 - 107 Street, Edmonton, T5K IE7.

For the germination test, you must submit a 4-ounce sample plus $2.50. A 2-pound sample plus $5 is required for the grade certificate.

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Alberta
COMMUNICATIONS

March 29, 1976

FOR IMMEDIATE RELEASE

SUMMER FARM EMPLOYMENT PROGRAM 1976

Alberta's minister of agriculture, Marvin Moore, has announced that a Summer Farm Employment Program will again be available to Alberta's youth and farmers.

This year the program will accommodate approximately 1,150 students compared with last year's enrollment of over 6,000 and the program will operate only during July and August.

All Alberta farmers are eligible to participate in the program, but this year a farmer will not be permitted to hire a member of his immediate family. Employer applications will be considered on a first come first serve basis but priority will be given to those farmers who did not participate in the 1975 program.

To qualify students must be Alberta residents and at least sixteen years of age. All employees will be required to attend a farm safety seminar which will be provided by Alberta Agriculture.

Under the Summer Farm Employment Program, the Alberta government pays one-half of the employee's salary up to a maximum of $200 per month. The objective of the program is to provide farmers with summer labor and to provide farm work experience to Alberta youth.

Farmers who hire students under the program are required to make every effort to provide the employee with a variety of farm tasks so that he becomes familiar with general farming operations.

Information and application forms for the Summer Farm Employment Program can be obtained from district agriculturists and Canada farm labor pool offices. After the applications have been reviewed, applicants will be notified in writing regarding the status of the application.

March 29, 1976

FOR IMMEDIATE RELEASE

FLAXSEED SITUATION

by Peter Perkins
Market Analyst
Alberta Agriculture

The current flaxseed price situation and outlook remains clouded by two counterbalancing factors. World flaxseed supplies are tight, but demand remains sluggish.

Since it is difficult to see any significant alteration in this situation, prices will probably remain in the neighborhood of the current price of $6 per bushel net to the producer for the remainder of the crop year.

The 1975-76 global production of flaxseed is estimated at approximately 100 million bushels. This is a little more than the poor crop of the previous year, but is not much more than half the size of the record crop of 1970-71. Furthermore, this level of production is some 20 per cent less than the traditional annual consumption levels established in the 1969-1972 period.

Despite this small crop and tight supplies, flaxseed prices are currently at only half their record level of 18 months ago. The reason for this is that consumption has contracted to such an extent that a build-up in stocks appears unavoidable.

Flaxseed prices are generally determined by conditions in the market for linoil. Linoil is a prime drying agent popular in the production of exterior paints and other protective coatings. Being an industrial oil, the demand for linoil has tended to relate closely to the general level of economic activity in the major industrial nations.

In the last two years, however, the demand for linoil, and, hence flaxseed, has contracted, partly because of the slowdown in general economic activity and partly because cheaper substitute products have penetrated deeply into traditional linoil markets.

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It is expected that industrial nations will continue to show improved economic conditions in the coming year, but it remains to be seen whether this will help expand the market potential for linoil. Under more normal conditions, this would be the case. But recent activity in the linoil market suggests this might not happen, at least not to the extent it has happened in previous business cycles.

The problem appears to be that linoil was so expensive in relation to substitute commodities, particularly soyoil, that a large share of the traditional market for linoil was absorbed by soyoil and other synthetic resins used in paint production. Although soyoil is an inferior drying agent compared with linoil, it is used extensively in protective coatings in place of linoil when linoil is too highly priced. Throughout most of 1974 linoil was priced higher than $1,100 per tonne in Rotterdam, while soyoil was less than $800 per tonne. This price situation forced a substitution of soyoil for linoil.

It is expected that, as linoil prices decline, there will be a switch away from soyoil and synthetics back to linoil. The degree to which this re-opening of traditional linoil markets occurs, will depend on the willingness of paint and varnish manufacturers to revert to old practices, and this of course will be determined by relative prices.

Currently linoil is selling for about $525 per tonne in Europe but is still holding a premium in excess of $100 per tonne over soyoil. This price relationship is still too wide to induce a sustained pick-up in demand for linoil.

Thus the flaxseed and linoil industry is faced with a paradox. More flax production is needed to guarantee regular supplies at lower and more competitive prices, but who will grow flax for a lower price when wheat is offering such good prospects?

It is essential that greater supplies of flaxseed become available to the market to guarantee supply to customers who need to be able to rely on regular and sufficient supplies for efficiency in their business operations.

- (cont'd) -

Since flaxseed is traditionally grown on land in competition with wheat, it must be competetive in terms of net returns to producers. In the past it has been observed that flax acreages decline when wheat prospects are good, regardless of the price for flax. This has been the situation over the past few years and is still the situation today.

Hence, a tight situation for flaxseed will continue and demand will remain sluggish simply because supplies will be insufficient to encourage traditional users to revert to linoil in their paint and varnish manufacturing processes. Linoil prices, therefore, will likely remain steady, preventing any sustained upturn in flaxseed prices. If soyoil prices rise later in the year, which is possible with reduced soybean output for 1976-77 expected, it is likely that by late 1976 increased demand for linoil could force prices higher. This in turn could see flaxseed prices above $7 per bushel net to producers in 1977.

March 29, 1976

FOR IMMEDIATE RELEASE

WORLD POULTRY MEAT OUTLOOK

This year is expected to be a good year for Alberta poultry meat porducers. Production is forecast to increase by nearly 23 per cent compared with last year, says Alberta Agriculture's commodity officer, David Rous.

Last year's broiler marketings through federally inspected plants were over 19,000 tonnes, representing an increase of almost 9 per cent over the previous year. Turkey production in 1975 was over 7,600 tonnes, down 10 per cent from 1974. However, sales were about equal to 1974 because production was curtailed to erode a burdensome inventory.

According to Don Potter, secretary-manager of the Alberta Broiler and Turkey Growers Marketing Boards, 1975 turned out to be one of the best years for the poultry industry in a long time after its shaky beginning. "With the continued break in feed costs, this year could be even better," he says.

Canada

Total Canadian poultry meat production is forecast at 447,000 tonnes this year, an increase of about 6 per cent compared with 1975. Broiler production, the major component, is expected to be up 5 per cent from 297,000 tonnes to 313,000 tonnes and turkey production is forecast to be up 15 per cent to about 100,000 tonnes.

United States

Total U. S. poultry meat production is forecast to rise 375,000 tonnes in 1976 to over 5.2 million tonnes.

U. S. broiler output may hit a record 4 million tonnes, while a near-record 870,000 tonnes is expected for turkey meat. Gains will be especially strong during the first half of this year with turkey meat output rising 15 to 20 per cent over the same period in 1975.

- (cont'd) -

World Poultry Meat Outlook (cont'd)

Other Major Poultry Meat Producing Countries

Japan's total poultry meat production is forecast to rise about 5 per cent to 777,000 tonnes this year. The dominant broiler industry will account for 640,000 tonnes, an increase of 5 per cent campared with 1975.

Total European Economic Community (EEC) poultry meat production is expected to rise about 3 per cent to 3.3 million tonnes this year compared with 1975. About two-thirds of EEC poultry meat comes from broilers. France is the leading broiler producer with Italy and the United Kingdom close behind. These three countries produce about 70 per cent of the EEC's broiler output, and about 90 per cent of the EEC's relatively small turkey output.

The EEC accounts for over two-thirds of world poultry product imports and 80 per cent of world poultry exports.

Soviet poultry meat production is tentatively estimated to be about 12 per cent below last year's level of 1.6 million tonnes. Poultry slaughter was high in 1975 because of the feed shortage which resulted from the severe drought, and there is no way that the Soviet Union can expand its poultry production until the new crop is harvested.

March 29, 1976

FOR IMMEDIATE RELEASE

DEADLINE FOR STABILIZATION CLAIMS

The deadline for submitting claims for federal stabilization payments under the Cow Slaughter Stabilization Program and the Beef Cattle Stabilization Program is April 30, 1976.

The Cow Stabilization Program, in effect from November 16, 1974 until April 30, 1975, authorizes federal government payments of $5.08 per hundredweight (liveweight) on all cows slaughtered during that period.

The Beef Cattle Stabilization Program, in effect from August 12, 1974 to August 11, 1975, authorizes the payment of 48¢ per hundredweight (liveweight) on all cattle in grades A, B and C which were sold for slaughter during that period.

Claim forms for these stabilization payments can be obtained from packing plants, auction markets, provincial district agriculturists and the livestock division of Agriculture Canada in both Edmonton and Calgary.

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March 29, 1976

FOR IMMEDIATE RELEASE

PESTICIDE IMPORTATION REGULATION CHANGED

Alberta Agriculture advised farmers and others planning to import unregistered pesticides for their own use to contact Agriculture Canada's plant products division before purchasing the product.

According to information received from Agriculture Canada, a new regulation came into effect earlier this month which states that a person importing a pesticide for his own use must complete a declaration form giving a detailed description of the product and its intended use. If the importation is approved, the prospective importer must sign the form in the presence of a plant products division officer who will then countersign it.

The previous regulation required much less detailed information. Also, the prospective importer could obtain a simplified version of the present form from a number of agencies in addition to the plant products division. Now they can be obtained only from a plant products division office. These offices, located in Grande Prairie, Edmonton, Red Deer, Calgary and Lethbridge, also have more information on the new regulations.

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March 29, 1976

FOR IMMEDIATE RELEASE

OFFENSIVE ODORS IN DUGOUT WATER

A high concentration of organic matter will cause the water in a dugout to turn black when it is frozen over and will cause the water to develop an offensive odor.

Ron Johnston, water and sewage specialist with Alberta Agriculture, explains that the water turns black and develops an unpleasant odor when a dugout with a high organic content freezes over because the ice prevents oxygen from coming in contact with the water. When the oxygen in the water is used up, the organic material breaks down without oxygen and produces hydrogen sulphide gas. In addition to smelling like rotten eggs, the hydrogen sulphide reacts with the organic matter in the water, turning the water black.

The problem is not encountered in the summer because the water is exposed to the oxygen in the air which breaks down the organic matter without producing an odor. Any hydrogen sulphide that is produced is soon dissipated.

What is the solution to the problem? According to Mr. Johnston, there is no economical way of resolving the problem at this time of year. It will usually clear up by itself within a month after the ice has melted. "The water," he says, "is safe to use for livestock."

However, you can prevent the same situation from occuring next year by controlling the algae and aquatic weed growth before it becomes established this spring. "Once you can see the algae in the water, it is too late to take effective action," Mr. Johnston says. "There will already be enough organic matter in the water to cause a problem next winter."

He recommends using copper sulphate to control the algae and a chemical like Diquat to control the aquatic weeds.

- (cont'd) -

Offensive Odors in Dugout Water (cont'd)

Other control measures include removing any trees growing around the dugout, to prevent their leaves from falling into the water, and diverting away from the dugout drainage water from a barnyard or feedlot. Apart from causing bacterial contamination of the dugout, the water that drains from these areas contains nutrients which promote the growth of algae and aquatic plants.

"Anyone who is planning to make a dugout should always choose a location that will not be affected by the drainage from barnyards or feedlots," Mr. Johnston adds.

Information on building a farm dugout and on the use of chemicals to control weed growth in an existing dugout can be obtained from your local agricultural engineering technologist. He can be contacted through your district agriculturist.

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FOR IMMEDIATE RELEASE

YOUTH ACHIEVEMENT FAIR

Have you heard about Alberta's Youth Achievement Fair scheduled to take place on April 24 and 25 at the Stampede Park in Calgary? If you are between the ages of 10 and 22 and your parents are farming, you are eligible to exhibit pedigreed and commercial cereal seed, oil seeds and forage seed, as well as seed potatoes.

All seed exhibits must have been grown on the family farm last year, and entries must be licensed for sale in Canada by Agriculture Canada's plant products division. Exhibits in the seed potato classes must have been grown from pedigreed seed.

Awards will include gold wrist watches or the equivalent, cash prizes, special prizes and ribbons for the top 12 places in each class.

The fair is being held in conjunction with a variety of other interesting activities such as a large livestock show and the Home Expo and Science Fair. It will include a number of displays and demonstrations designed to inform the public about the work being done by 4-H clubs, junior forest wardens and other youth organizations.

Further information on exhibiting at the fair and entry forms can be obtained by writing to Youth Achievement Fair, 4-H and JFW Branch, Alberta Recreation, Parks and Wildlife, 5th floor, Centennial Building, 10015 - 103 Avenue, Edmonton, T5J OHI. Entry forms are also available from the field offices of Alberta Recreation, Parks and Wildlife, Alberta Agriculture and grain company representatives.

The deadline for receipt of exhibits is April 21. They should be mailed to Youth Achievement Fair, Alberta Recreation, Parks and Wildlife, 140 - 1st Avenue S. W., Calgary. T2P OA5. There is no entry fee for any exhibit.

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March 29, 1976

FOR IMMEDIATE RELEASE

TWO MEMBERS APPOINTED TO AGRICULTURAL DEVELOPMENT CORPORATION BOARD

Alberta's minister of agriculture, Marvin Moore, has announced the appointment of two new members to the board of directors of the Alberta Agricultural Development Corporation. They are Mrs. Barbara Tiegs of Brooks and Hugh Bawden of Edmonton.

Mrs. Tiegs and Mr. Bawden will join Gloria Pacquette, Kay Watson, Ken Danyluk, Jim Elliott, William Picard, Oliver Noel, Gerald Gunby and Lorne Ordze on the board. In their capacity as members of the board of directors,they will help to formulate lending policies and the general business of the corporation.

The board of directors approves or rejects all loan applications that are in excess of $100,000 and make final decisions on farm loans which are appealed through local agricultural development committees.

Mrs. Tiegs, a native of southern Alberta, has an extensive background in farm life and farm organizations. Although she has been extensively involved in business management in her family ranching and irrigation operation, she has still found time to serve as a director of the Women of Unifarm, on the board of the Southern Alberta Presbytery of the United Church of Canada and as an Alberta representative to various conferences. At the moment Mrs. Tiegs is involved as vice-president of the Women of Unifarm; as a member of the provincial board of Unifarm; as director of the Canada Farm Labor Pool Board in Brooks and as a delegate to the Unifarm Exchange Program in Quebec.

Mr. Bawden has had an equally varied career. Born in Moose Jaw, Saskatchewan, he attended the University of Saskatchewan and joined the Canadian Imperial Bank of Commerce. After an extensive banking career in that province, he was transferred in 1957 to become manager of the Ponoka branch and several years later to the St. Paul branch. In 1972 he was appointed manager of the Wetaskiwin branch where he remained until his retirement in 1974, after 35 years of banking experience.

- (cont'd) -

Two Members Appointed to Alberta Agricultural Development Corporation (con't'd)

Mr. Bawden participates in a great number of activities involving chambers of commerce and Kinsmen clubs. He has also served as a member of the St. Paul Recreation Board; as a member of a St. Paul hospital advisory board and is an active supporter of amateur sports.

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March 29, 1976

FOR IMMEDIATE RELEASE

ASSOCIATE DIRECTOR OF FAMILY FARM DIVISION APPOINTED

Howard J. Fulcher has been appointed associate director of Alberta Agriculture's farm development division. His appointment was announced by J. L. Reid, director of the farm development division.

In his new position Mr. Fulcher will administer the division's rural services section and the agricultural services branch which is involved in administering and funding agricultural service boards and agricultural development committees. He will also administer the community organizations branch which is responsible for agricultural societies and other organizations and groups within the rural agricultural community.

Mr. Fulcher was born on a farm near Leduc. He attended the Olds College prior to serving overseas with the RCAF from 1941 to 1945. After the war he attended the University of Alberta, graduating in 1950 with a B. Sc. (agriculture).

Between 1950 and 1965, Mr. Fulcher served as district agriculturist at Olds and Edmonton. He was then appointed regional director of the northwest region of the province, the position he retained until 1974. For the last two years he was associate director for the extension division.

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April 5, 1976

FOR IMMEDIATE RELEASE

THIS WEEK

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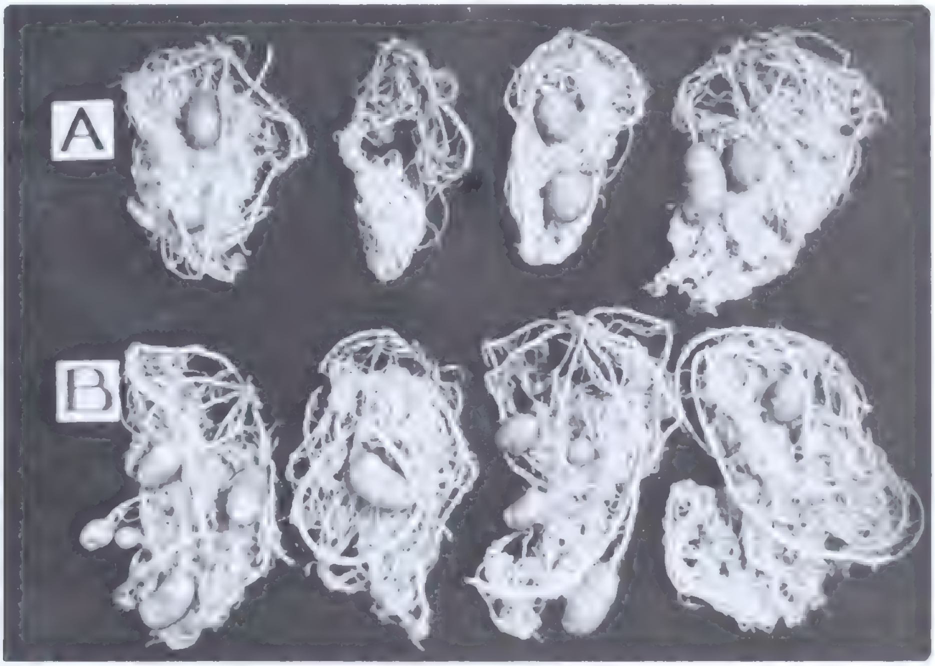
Phone (403) 427-2127

Alberta
AGRICULTURE
COMMUNICATIONS

April 5, 1976

FOR IMMEDIATE RELEASE

MAGNETICALLY TREATED SEED RESULTS



This picture shows (A) non-magnetically treated and (B) magnetically treated potatoes grown in field tests at Agriculture Canada's research station at Lethbridge. Plants grown from magnetically treated eyes yielded 14 per cent more marketable tubers that weighed 38 per cent more than those grown from untreated eyes.

Are you wondering whether you should magnetically treat your cereal seed this spring? Did you know that you can buy magnetically treated seed at no extra charge and that most municipal seed cleaning plants in southern Alberta and a number in other parts of the province will treat your seed free? Over 1,000,000 bushels of seed were magnetically treated in Alberta last year.

The controversy over the advantages of magnetized versus non-magnetized seed still continues, but one of Western Canada's leading authorities on magnetic seed treatment, Urban Pittman, strongly recommends it for barley. Mr. Pittman is an agronomist at the Agriculture Canada research station at Lethbridge.

- (cont'd) -

Magnetically Treated Seed Results (cont'd)

He reports that yield increases in the neighborhood of 5 to 10 per cent were obtained last year from magnetized Galt barley in five out of six tests. "These results," he says "were obtained under a wide variety of conditions and treatment methods."

In a treatment data test, for example, these increases were obtained regardless of whether the barley was treated three or 45 days before it was planted. Nor did it seem to make any difference to the results whether the seed was treated with an electromagnet or with a permanent magnet. The speed with which the seed was passed through the magnetic field had no effect on results either. Grain was treated at rates up to 2,000 bushels per hour.

However, in one off-station test, magnetically treated Galt barley showed a 10 bushel per acre decrease in yield compared with the control plot. Mr. Pittman explains this situation in terms of a moisture shortage. "The magnetically treated seed," he says "produced a higher plant population and more tillering and the crop matured earlier. The result was that it used up the limited moisture early in the season, and there was not enough to fill the grain properly." The grain from the treated seed weighed 42 to 44 pounds per bushel compared with 48 to 49 pounds per bushel for the untreated barley where there were fewer plants competing for the moisture.

What about magnetically treating spring wheat? Although scientiests at the research station at Lethbridge have not received consistent evidence that treating spring wheat increases yields, Mr. Pittman says he would still treat it. "We have never recorded any detrimental effects from treating and occasionally we record a yield increase," he says.

In 1973 Sundance winter wheat grown from magnetically treated seed produced more plants than non-treated seed and showed a trend towards greater winter survival. The treated wheat had the same number of tillers per plant as plants from non-treated seed, but yielded 1.8 bushels per acre more.

- (cont'd) -

The following year treated seed yielded 1.6 bushels per acre more than non-treated seed. Last year's trials were inconclusive because of the extreme growth and yield variation which resulted from a mosaic-like disease in the plots.

Small increases in the yield of magnetically treated durum wheat have been recorded at the research station.

To date no conclusive research results have been obtained from magnetically treated oats. However, a farmer in the Lethbridge area obtained a positive response when he conducted his own test. He planted magnetically treated Harmon oats in alternate seed drill widths (non-treated seed was planted in between), and asked the scientists at Lethbridge to evaluate the results. When they sampled his field at different locations, they recorded a 10-bushel per acre yield increase for the treated seed compared with the non-treated seed.

So far no yield advantage has been recorded for magnetically treated fall rye, but the scientists at Lethbridge plan a wider range of tests this year. No yield advantage has been recorded for magnetically treated flax either, but Mr. Pittman says there was a definite advancement in maturity attributable to magnetic treatment. In 1975 Span rapeseed yields were increased by magnetically treating the seed.

As far as is known, no work has been done on the effect of magnetic treatment on forage seeds. However, magnetic seed treatment research is being done on tree seeds, commercial vegetables and potatoes. Western Illinois University, Illinois, U. S. A., has spent the last three years investigating the effects of magnetically treating corn and soybeans. These investigations have shown an accelerated germination rate, improved germination in lower quality seed and larger total leaf area, especially at earlier stages of growth and yield increases.

Purdue University, La Fayette, Indiana, U. S. A., has been investigating the effects of magnetism on horticuiatural crops for two years. Those involved in the research report significantly positive germination, growth and yield potential in such crops as tomatoes, peppers, cucumbers and sweet corn.

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Magnetically Treated Seed Results (cont'd)

Alberta Agriculture's regional plant industry supervisor for the Lethbridge area, Blair Shaw, who designed the magnetic seed treaters being used in municipal seed cleaning plants, reports that southern Alberta farmers who have planted magnetically treated commercial vegetable and potato seed have been impressed with the results Beans grown from magnetically treated seed, for example, emerged two to three days earlier than those that were not treated.

Mr. Shaw also reports that the response of field peas, potatoes and many garden plants has been impressive. Unfortunately, however, the farmers did not collect yield data, but a number of those involved in last year's experiments plan to harvest this year's crops from magnetically treated seed separately from the same crops grown from untreated seed.

In other tests involving sugar beets and corn, emergence and seedling vigor appeared to favor magnetic treatment.

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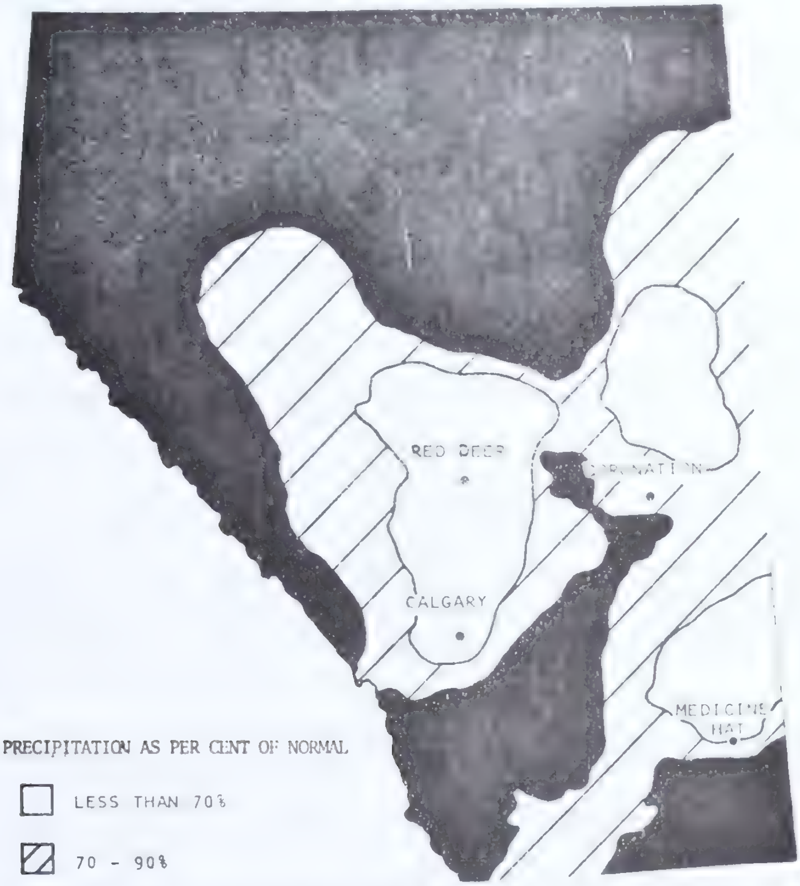
April 5, 1975

FOR IMMEDIATE RELEASE

LACK OF SOIL MOISTURE CAUSES CONCERN



The above map, covering the period from the last half of August into November 1975, shows the three main areas where fall precipitation was less than 70 per cent of normal.

Availability of soil moisture for the coming season over a considerable portion of Alberta's farmland is cause for concern.

Conrad Gietz, Alberta Agriculture's agrometeorologist, reports that last fall's precipitation totals were below seasonal averages in an area extending from just south of Calgary to north of Red Deer and in areas north of Medicine Hat and northeast of Coronation. "The relatively small carryover of stored moisture in these areas," he says "could well limit dryland productivity unless very substantial amounts of moisture are received this spring."

- (cont'd) -

Lack of Soil Moisture Causes Concern (cont'd)

Moisture carryover is especially important in the agricultural areas of southern Alberta because growing season precipitation is highly variable from one year to the next. Precipitation received between mid-August and freeze-up (November) contributes significantly to this carryover. It is during this period that moisture is readily stored in the soil because plant use of water is minimal and the unfrozen soil permits infiltration. Although winter snowfall does contribute to the precipitation carryover, its contribution is limited by runoff as long as the soil is frozen.

According to Mr. Gietz, scientists have come up with guidelines for the minimum depth of moist soil that is desirable prior to crop seeding. A depth of at least 27 inches is recommended for sandy loam soils. The recommended depth for soils containing more clay is slightly less.

Mr. Gietz says soil samples taken near Calgary in late February indicated a dry layer below the moist soil surface. This layer was about a foot thick under fallow land and from one to two feet thick under stubble.

Farmers who want to estimate the depth of moist soil in their fields can use a probe that is about half an inch in diameter. It is possible to tell when the probe reaches the dry layer because, as a general rule, moist soil offers less resistance to downward pressure on the probe than dry soil. District agriculturists can suggest other methods of measuring soil moisture, any of which will likely be of more value than a mere guess.

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April 5, 1976

FOR IMMEDIATE RELEASE

EFFECT OF PLANTING DATE ON RAPESEED

The date on which rapeseed is planted appears to have a definite relationship to yield.

Torch

Alberta Agriculture's cereal and oilseed crops specialist, Sherman Yelland, reports that preliminary results of studies carried out by Agriculture Canada at Beaverlodge and Fort Vermilion show that the Polish-type rapeseed, Torch, tends to yield more when planted between late May and early June than when planted earlier or later than these dates.

At Beaverlodge the least number of days between planting and harvesting Torch were recorded in plots seeded between the third week of May and early June. However, Torch planted in early May will mature before rape planted in late May.

Mr. Yelland points out that the choice of spring planting dates must take into consideration the risk of fall frosts. Concern about damage from fall frost may be as important as concern about yield in those areas with a very high risk of fall frost. However, in areas where the danger of a fall frost is not particularly high, it might be more profitable to delay seeding until the third or fourth week in May to take advantage of the higher yield potential. When seeding is delayed until late May, early, shallow tillage is advisable to break up the soil crust, reduce water loss from evaporation and encourage weed germination.

Tower

Preliminary test results for the Argentine rapeseed, Tower, indicate that it tends to yield more when planted during the last two weeks of May than when planted earlier or later.

Last year Tower tended to take the least number of days to mature when planted in the

- (cont'd)-

Effect of Planting Date on Rapeseed (cont'd)

second week of May, but required 10 to 30 days longer to mature than Torch. The time difference required for Tower rapeseed to mature was least when it was planted in the second week of May and greatest when it was planted in late May or early June.

In 1974 none of the Tower rapeseed planted on any of the dates matured. Hence, such things as early planting, the use of land with a relatively long frost-free growing period and the use of a grain dryer should all be considered before a decision to grow this high risk crop is made.

Because the performance of rapeseed varieties varies according to local climatic and soil conditions, Mr. Yelland strongly recommends that farmers carry out their own tests over at least a three-year period to determine optimum seeding dates, rates and depths as well as optimum fertilizer rates.

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April 5, 1976

FOR IMMEDIATE RELEASE

WEED CONTROL FAIR

If you want information on herbicides, granular applicators or specific problem weeds, come to Weed Control '1976.

This unique fair, which drew 3,000 farmers at Red Deer last year, will be held at Westlock and Calgary this year and is expected to attract 10,000 farmers. It will be held at the arena in Westlock on April 27 and at the Stampede Grounds in Calgary on April 29.

Weed Control '76 is an open fair which features exhibits, displays and demonstrations on all aspects of weed control. Over 50 exhibitors are participating this year, and their exhibits will cover weed control research, herbicides, weed control equipment and many of the new products and techniques that have been developed to keep up with rapidly expanding weed control technology. The fair will also feature a display of 1976 weed sprayers, many of which have significant improvements over older models.

Weed Control '76 is organized and sponsored by Alberta Agriculture's weed control branch.

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Alberta

April 5, 1976

FOR IMMEDIATE RELEASE

EXCHANGING COMMERCIAL RAPESEED FOR CERTIFIED RAPESEED

Have you considered exchanging your commercial rapeseed for good certified seed? Why not join the more than 75 per cent of Alberta farmers who plant certified rapeseed every year? Compared with commercial seed, the extra cost is only about 50¢ an acre.

If you want to exchange commercial rapeseed for certified rapeseed, all you have to do is offer it to a grain company, broker, market exchange agent or your local crushing plant. Then use the money to buy certified seed that you know is free of weeds like wild mustard and cleavers, and that is guaranteed to have very few, if any, other weed or crop seeds. Certified rapeseed is also guaranteed to have a high germination level and a low erucic acid content.

Cereal and oilseeds crop specialist, Sherman Yelland, says Alberta Agriculture personnel are alarmed at reports reaching them that some farmers are planning to plant their own rapeseed that may be contaminated, and, worse still, that they are buying rapeseed from a neighbor. A farmer who buys rapeseed from his neighbor has no guaranteed germination level or erucic acid content. Nor has he any guarantee that the seed he has bought is free of weed seeds and other crop seeds.

Why take a chance like this when you can have all the protection you need for an extra cost of only about 50¢ an acre?

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April 5, 1976

FOR IMMEDIATE RELEASE

SHEEP SHEARING COURSE

The Alberta Sheep and Wool Commission, in co-operation with Olds College, is holding a sheep shearing course on April 21 and 22.

The course will start at 9:00 a.m. in the Animal Science Building at Olds College and will include lessons on trimming a sheep's feet. The instructor is Duncan McAlpine of Barrhead and the fee is $10. Registration is at 8:30 a.m.

More information on the course and application forms are available from Olds College, Division of Continuing Education, Olds, Alberta, TOM IPO. (Telephone 226-8343).

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April 5, 1976

FOR IMMEDIATE RELEASE

BEEKEEPING COURSE

A beekeeping course, designed for beginner beekeepers, commercial apprentices and beekeepers' helpers, is available at Lakeland College in Vermilion.

This course will include theoretical information and on-the-job training. It will consist of six home-study lessons and two two-day seminars.

The spring seminar will be held on April 29 and 30. It will give course participants an opportunity to learn proper beekeeping techniques through the handling of bees and equipment under supervision.

The second seminar is scheduled for August 26 and 27 so that students will have practical experience in harvesting, extracting and storing honey. They will also learn how to overwinter bee colonies.

Tuition for the complete course is only $42. The cost of room and board at the college during the seminars is $6.75 per day. Students are expected to provide their own gloves and veils.

Further information and registration forms can be obtained from the registrar, Lakeland College, Vermilion Campus, Vermilion, Alberta, TOB 4MO. (Telephone 853-5366).

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COMING AGRICULTURAL EVENTS

1976

Canada Grains Council Annual Meeting, Winnipeg Inn, Winnipeg, Manitoba	April 20 - 21
Alberta Home Economics Association Convention, Calgary Inn, Calgary, Alberta	April 21 - 23
International Salon of Farm Machinery, Place Bonaventure, Montreal, Quebec	April 22 - 25
Youth Achievement Fair, Stampede Grounds, Calgary, Alberta	April 24 & 25
World Charolais Federation, Johannesburg, South Africa	April 27 - May 1
"Quality Assurance in the Food Industry", Special One Day Seminar sponsored by Alberta Section, Canadian Institute of Food Science and Technology, Edmonton Plaza Hotel, Edmonton, Alberta	April 28
International Congress of Agricultural Engineers (CIGR), Baden near Vienna, Austria	May 17 - 20
Canadian Institute of Food Science and Technology, Annual Conference, Chateau Laurier Hotel, Ottawa, Ontario	May 30 - June 2
Alberta Women's Institute Annual Convention, Olds College, Olds, Alberta	May 31 - June 3
Canadian Council on 4-H Clubs, Charlottetown, P.E.I	June
International Commission on Irrigation and Drainage, Banff, Alberta	June 5 - 12
Alberta Institute of Agrologists Annual Convention, Waterton, Alberta	June 10 - 12
International Society of Soil Science, "Agrochemicals in Soils", Jerusalem, Israel	June 13 - 18
Western Society of Soil Science, Missoula, Montana, U. S. A	June 13 - 16
American Co-op Educators Institute, Banff, Alberta	June 17 - 20
Federated Women's Institute of Canada Annual Meeting, University of P.E.I., Charlottetown, P.E.I	June 20 - 26
Canadian Seed Trade Association Annual Meeting, Holiday Inn, Halifax, Nova Scotia	June 21 - 23
Western Society of Crop Science Meeting, Washington State University, Pullman, Washington, U.S.A	June 21 - 24
Alberta Pork Congress, Exhibition Grounds, Red Deer, Alberta	June 22 - 24

Canadian Water Resources Association National Conference, Constellation Hotel, Toronto, Ontario	June 24 & 25
American Society of Agricultural Engineers, University of Nebraska, Nebraska, U.S.A	June 27 - 30
7th International Sunflower Conference, Krasnodar, U.S.S.R	June 27 - July 3
Canadian Agricultural Extension Council Conference, Charlottetown, P.E.I	June 28 - 30
7th World Hereford Conference, Banff, Alberta	June 28 - July 2
Co-operative Union of Canada Annual Meeting, Quebec City, Quebec.	June 29 July 3
Canadian Society of Agricultural Engineering, Nova Scotia Hotel, Halifax, Nova Scotia	July 4 - 8
Agricultural Institute of Canada Annual Meeting, Halifax, Nova Scotia	July 4 - 8
The Royal Agricultural Show, Royal Agricultural Society of England, National Agricultural Centre, Stoneleigh, Kenilworth, Warwickshire, England, CV8 2LZ	July 5 - 8
Canadian Feed Manufacturers' Association Annual Conference, Inn on the Park, Toronto, Ontario	July 7 - 9
Agricultural Service Board Weed Tour, Lac St. Anne, Alberta	July 7 - 9
International Hereford Show, Calgary Exhibition & Stampede Grounds, Calgary, Alberta.	July 8 & 9
Canadian Seed Growers' Association Annual Conference, Sheraton Landmark Hotel, Vancouver, British Columbia.	July 8 - 10
First International Symposium (Feed Composition, Animal Nutrient Requirements and Computerization of Data), Utah State University, Logan, Utah, U.S.A	July 11 - 16
Canadian Home Economics Association Convention, Ottawa, Ontario	July 15 - 17
International Federation for Home Economics Congress, Skyline Hotel, Ottawa, Ontario	July 19 - 23
American Society of Civil Engineers, Irrigation and Drainage Specialty Conference, University of Ottawa, Ottawa, Ontario	July 21 - 23

Klondike Days Agricultural Feature Show - Farmfair '76, Exhibition Grounds, Edmonton, Alberta	July 21 - 31
Canadian Federation of Agriculture, Prince Albert, Saskatchewan	July 27 - 29
Conference of Canadian Ministers and Deputy Ministers of Agriculture, Hilton Hotel, Quebec, Quebec.	July 27 - 30
10th International Course on Vocational Eduction & Teaching in Agriculture, Gwatt & Zollihofen, Switzerland.	July 29 - August 27
Horticulture Week, Olds College, Olds Alberta.	August 2 - 6
Reclamation Symposium, Ohio Agricultural Research and Development Centre, Wooster, Ohio, U.S.A	August 9 - 12
International Society of Soil Science, Salinity Conference, Texas Technical University, Lubbock, Texas, U. S. A	August 16 - 20
Dewberry Agricultural Society Mini-Fair, Dewberry, Alberta.	August 18
World Simmental Congress, Pretoria, South Africa	August 25 - September 8
International Society of Soil Science International Congress on Irrigation and Drainage, ''Water in Heavy Soil'' Brateslova, Czechoslovakia	September 8 - 10
Feed Industry Conference, Palliser Hotel, Calgary, Alberta	September 23 & 24
Canada Grains Council Semi-Annual Meeting, Vancouver, British Columbia.	October 27 & 28
International Salon of Food and Agriculture, Place Bonaventure, Montreal, Quebec	November 2 - 7
Alberta Beekeepers' Association Convention, Edmonton Plaza Hotel, Edmonton, Alberta	November 3 - 5
Northern Alberta Hereford Club Annual Meeting, Bruderheim, Alberta	November 6
Women of Unifarm Annual Convention, Macdonald Hotel, Edmonton, Alberta.	November 8 & 9
Canadian Simmental Association Annual Meeting, Toronto, Ontario.	November 11 - 14
Alberta Association of Municipal Districts and Counties, Macdonald Hotel, Edmonton, Alberta.	November 16 - 19

Annual Meetings of the American Society of Agronomy,
Crop Science Society of America and Soil Science Society of America,
Houston, Texas, U.S.A. . . . . November 28 - December 3

Cattlemen's Short Course,
Banff, Alberta . . . . November 28 - December 3

Royal Smithfield Show,
Earl's Court, London, England . . . . .December

Unifarm Annual Convention,
Macdonald Hotel Edmonton, Alberta. . . . . .December 6 - 10

Alberta Hereford Association Annual Meeting,
Red Deer, Alberta . . . . December 6 & 7

American Society of Agricultural Engineers, Soil Science Society of America, "Drainage for Crops",
Chicago, Illinois. . . . . .December 13 - 14

Alberta Irrigation Projects Association Annual Meeting, 30th Anniversary,
Lethbridge, Alberta. . . . . December 15

1977

Canadian Charolais Association Annual Meeting,
Brandon, Manitoba . . . . February 3 - 6

Agricultural Service Board Conference,
Red Deer, Alberta . . . . February

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Alberta
AGRICULTURE

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FOR IMMEDIATE RELEASE

VEGETABLE GROWERS' ASSISTANCE PROGRAMS ANNOUNCED

Alberta's minister of agriculture, Marvin Moore, has announced two new programs for vegetable growers in the province. They are the Vegetable Producers' Loan Program and the Market Garden Development Program, both of which will replace the Fresh Vegetable Incentive Program.

Vegetable Producers' Loan Program

The Vegetable Producers' Loan Program is designed to help vegetable producers obtain equipment that is specifically used for vegetable production. Loans can be used to purchase or modify equipment, to construct, alter or repair buildings used for vegetable and potato storage and to buy equipment needed to handle, store and sell these crops. Approved irrigation equipment, particularly automatic irrigation equipment, is also covered by these loans.

The interest rate is prime plus one per cent and the maximum term is 10 years. The maximum loan guarantee is $50,000 per grower, which can be used to cover one or more loans.

Farmers who obtain at least 50 per cent of their annual net income from their farm; whose total assets are less than $250,000 and who qualify as a potato grower, vegetable grower or market gardener, are all eligible for these loans. To qualify as a potato grower the applicant must be licensed by the Alberta Potato Commission, while a vegetable grower must be a member of the Alberta Fresh Vegetable Marketing Board.

Growers who achieve their stated objectives in vegetable production and who meet all the objectives of the program will be eligible for an annual interest rebate on the declining principal balance for the term of the loan, if they are up to date on their repayment schedule. The interest rebate amounts to 2 per cent.

Eligible vegetable producers should apply to the Alberta Agricultural Development Corporation in Camrose for these low interest loans.

- (cont'd) -

Vegetable Growers' Assistance Programs Announced (cont'd)

Market Garden Development Program

The Market Garden Development Program is intended to increase market gardening in Alberta by providing producers who grow a minimum of two acres with a development grant of $100 an acre. The maximum grant is $300.

To be eligible for one of these grants, a market gardener must produce and market all his produce from a minimum of two acres. The grants cover all vegetable crops, except potatoes, that are commonly grown in Alberta and raspberries and strawberries. The vegetables and fruits must be grown under normally acceptable cultural practices and must be sold directly to the consumer. Marketing can be done through farm gate sales, farmers' markets or on a 'pick-your-own' basis.

Market gardeners can receive this grant for a maximum of only two years. Hence, a person who received a grant last year under the Vegetable Incentive Program will be eligible for only one year's grant under the Market Garden Development Program. Market gardeners who received grants for two or more years under the Fresh Vegetable Incentive Program are not eligible for the Market Development Program,but are eligible for a long-term, low interest loan under the Vegetable Producers' Loan Program.

Eligible vegetable growers who want to take advantage of the Market Garden Development Program must file an application by July 1 with the Horticulture Branch, Alberta Agriculture, 9718 - 107 Street, Edmonton, T5K 2C8.

Additional information on both programs can be obtained from the horticulture branch and from district agriculturists.

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April 12, 1976

FOR IMMEDIATE RELEASE

MINISTER URGES FERTILIZER PURCHASES NOW

Alberta's minister of agriculture, Marvin Moore, urges Alberta farmers to purchase and take delivery of their 1976 fertilizer supplies now.

Although the general supply picture looks good, the problem is one of getting anticipated supplies to farmers when they need them. This problem has been compounded by a rather slow demand this winter and by an increase in the anticipated demand for the coming crop year.

The fertilizer and transportation industries are faced with the delivery of the largest volume of supplies ever recorded as 723,000 tons of fertilizer are expected to be used by Alberta farmers this spring. However, more than 60 per cent of this volume still has not been purchased or delivered. If farmers put off purchasing until seeding time, transportation and distribution limitations could cause shortages.

The Minister feels that farmers should have a basic quantity of fertilizers on hand now even though they may not have finalized all their seeding plans. "It would be ironic," he says "to be caught short in a year when supplies are sufficient to meet demand."

As larger volumes of fertilizers continue to be used by farmers each year, in the future they are going to have to purchase and take delivery of a greater portion of their supplies well in advance of seeding.

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April 12, 1976

FOR IMMEDIATE RELEASE

SILAGE VERSUS BARLEY AS THE BEST USE OF LAND FOR FEED

by Walter Dietz
Alberta Agriculture's Regional Livestock Supervisor
at Vermilion

How can I get the best value from my land in terms of feed -- by growing barley to harvest as silage or to harvest as grain and straw?

Assuming an equal dry matter yield and based on average feed analysis, an estimate indicates a barley crop harvested as silage provides about 19 per cent more protein and 8 per cent less digestible energy than a barley crop harvested for grain and straw. However, the class of cattle to be fed will have a significant influence on the type of crop that will give you the best value from your land base.

The following examples compare barley silage with a mature barley crop for feeding calves and for maintaining beef cows. The rations are formulated with silage and with straw and grain to provide equal nutrient levels. Although they are not the only ration possibilities, they provide a basis for comparison.

In the first example a 250-acre land base is used to feed and grow 500-pound calves to 750 pounds (i.e. average weight 625 pounds), and in the second example the same land base is used to maintain beef cows. It is assumed that a 60-bushel per acre barley crop will produce 5,760 pounds of dry matter per acre as silage, or 2,880 pounds of grain per acre plus 2,880 pounds of straw per acre when harvested as a mature crop. No allowance has been made in the calculations for losses which occur between the standing crop and the feed bunk because they vary considerably from one farm to another.

CALVES

Ration 1 -	Silage	11.0 pounds dry matter
	Barley	6.0
	32% supplement	1.0
	Total	18.0 pounds dry matter
Ration 2 -	Barley	11.5 pounds dry matter
	Straw	5.0
	32% supplement	1.5
	Total	18.0 pounds of dry matter

- (cont'd) -

Silage Versus Barley as the Best Use of Land for Feed (cont'd)

With Ration 1, to utilize 120 acres of silage, it would be necessary to use 130 of the 250 acres to grow a mature barley crop. This combination would provide 62,625 calf-days of feed if 62,625 pounds (31.3 tons) of a 32 per cent supplement were added.

With Ration 2 the grain production would limit the number of calf-days of feeding, which means 250 acres of mature barley would support 62,500 calf-days of feeding with the addition of 93,750 (46.9 tons) of a 32 per cent protein supplement.

Thus, in this example, the best land use would be achieved with Ration 1 rather than with Ration 2. With Ration 1 a farmer would get 125 more calf-days of feed and require 15.6 less tons of a 32 per cent protein supplement.

Cows

Alternative 1

Assuming silage would have sufficient nutrient content to maintain a cow eating 18 pounds of dry matter per day, 250 acres would support 80,000 cow-days of feeding or 444 cows for 180 days.

Alternative 2

A ration of equal nutrient content, using a mature barley crop, would require a cow to eat 15 pounds of straw, 5 pounds of barley and one pound of a 32 per cent protein supplement per day. The amount of straw that can be grown on 250 acres is the limiting factor in this ration.

Two hundred and fifty acres would produce sufficient straw for 48,000 cow-days or 267 cows for 180 days. The ration would also require 24 tons of a 32 per cent protein supplement and 5,000 bushels of barley. Since total barley production on the 250 acres was assumed to be 15,000 bushels, there would be 10,000 bushels left to be sold as a cash crop. The land base with this alternative would provide an income from 267 cows plus a net cash return from the sale of barley after deducting the cost of 24 tons of supplement.

Alternative 3

Assuming the farmer wanted to keep the number of cows and days constant (i.e. 444 cows for 180 days) and feed the same ration as in Alternative 2, he would require 8,325 bushels of barley, 40 tons of a 32 per cent protein supplement and 600 tons of straw.

Silage Versus Barley as the Best Use of Land for Feed (cont'd)

Since 250 acres would produce only 360 tons of straw, the remaining 240 tons would have to be harvested from other land. This alternative then would provide an income from 444 cows plus a net cash income from 6,675 bushels of barley after deducting the cost of supplements and the additional straw.

The above calculations indicate that maximum use of the 250 acres would be achieved through growing barley silage if calves were to be fed and through growing a mature barley crop if beef cows were to be maintained. These calculations reflect the fact that one gets maximum protein yield from barley silage and maximum energy yield from a mature barley crop.

April 12, 1976

FOR IMMEDIATE RELEASE

A NEW POLISH RAPESEED VARIETY

Alberta rapeseed growers may be changing-over again to a new rapeseed variety. This time it would be from the present low erucic acid and high glucosinolate varieties to a double low Polish variety.

According to Alberta Agriculture's cereal and oilseeds crop specialist, Sherman Yelland, double low means that the variety is low in the erucic acid component of the oil (not over 0.8 per cent in the foundation seed class and not over 1.8 per cent in the certified seed class) and low in the glucosinolate component of the meal. It is the glucosinolate component of present rapeseed varieties that limits their use in livestock and poultry feeds.

The new rapeseed variety was sent to California last fall for winter increase. The seed is now being sent back to Canadian crushers who are distributing it, under contract, to pedigreed rapeseed growers for multiplication.

"After having been assessed for its agronomic characteristics, it will be returned to the crushers next fall to undergo crushing tests for both oil and meal quality," Mr. Yelland says.

If it measures up to last year's performance in Alberta, it is almost certain to be further selected and winter increased again.

So far the double low Polish rapeseed variety has performed much better in Alberta than in either Saskatchewan or Manitoba. Mr. Yelland says, "If everything goes as planned over the next few months an application for a license will probably be submitted next winter, and stocks will likely be distributed to pedigreed seed growers by the stock seed distribution committees in each province."

Mr. Yelland believes the double low Polish rapeseed variety would be a real boon to Alberta rapeseed growers because the double low Argentine variety, Tower, is much better suited to growing conditions in Saskatchewan and Manitoba than to those in Alberta.

April 12, 1976

FOR IMMEDIATE RELEASE

OAT VARIETIES

Alberta Agriculture's cereal and oilseeds crop specialist, Sherman Yelland, says that the many new and improved oat varieties now on the market have resulted in renewed farmer interest in this crop.

He points out that new procedures have made possible the production of high quality protein from oats and that some of the new varieties give a higher yield, stronger straw and earlier maturity than many of the traditional varieties. Also, oats are more tolerant of acid soils than other grain crops.

Agriculture Canada research scientists in the Peace River region report that Random oats are the most commonly grown variety in that area. They say this medium-early variety has given the highest average yield of all varieties in more than 50 tests conducted in the Peace River region.

The new, early variety, Cavell, matures three to five days earlier than Random and its yield is generally close to that of Random. According to the scientists, it has yielded particularly well in the Fort Vermilion-High Level region.

The late-maturing variety, Grizzly, matures three to five days later than Random and does not generally yield as well as Random in the Peace River region. Its lower average yield may be because its later maturity makes it more susceptible to fall frost damage.

The new oat variety, Gemini, matures one or two days later than Random, and in the Peace River region its yield is between that of Random and Grizzly. It has the largest seed of any variety tested by the Agriculture Canada scientists, and it has a good bushel weight. Gemini has a low percentage of hull and has a good yield of straw for forage.

The Rodney oat variety matures about the same time as Gemini, but has a much lower yield. Rodney oats are grown mainly for their good looking seed.

The Hinoat variety matures five to seven days earlier than Random, but the average yield has been less than two-thirds that of Random in the Peace River tests. The main advantage of Hinoat over other oat varieties is its high protein content, which averages about 20 per cent compared with just under 17 per cent for Random.

- (cont'd) -

Oat Varieties (cont'd)

Compared with Random, Hinoat is shorter, has smaller seed and a higher percentage of hull. However, it has a higher bushel weight and is normally grown under contract where a special premium is paid for protein content.

Terra is a new hulless oat variety which has given a yield similar to that of Random, but the supply of seed is very short this year.

Victory oats are grown mainly for the feeding quality of the straw, and Harmon oats are grown for their good seed size. Both varieties are late maturing and lower yielding than Random.

Mr. Yelland advises farmers throughout Alberta to use the publication "Varieties of Cereals and Oilseed Crops for Alberta - 1976" as a guide for choosing their oat varieties. He suggests they try the most promising varieties to see whether they perform better than the ones they are presently growing.

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FOR IMMEDIATE RELEASE

BETZES STILL THE LEADING MALTING BARLEY

Betzes is still the leading two-row malting barley in the Canadian Prairies.

Information received by Alberta Agriculture's plant industry division states that the new variety, Hector, has been turned down by the United States Malting and Brewing Improvement Association.

Tests conducted by the association in collaboration with American maltsters and brewers have shown Hector to be inferior to both Betzes and Klages. This information reverses earlier expectations that Hector would replace Betzes as a malting barley in south-central and south-eastern Alberta.

However, Alberta Agriculture's oilseeds and cereal crops specialist, Sherman Yelland, strongly recommends that farmers in these areas do not overlook the value of Hector as a feed barley. He points out that this two-row, smooth-awned variety has out-yielded the high yielding feed barley, Galt, in the light brown soil zone of south-eastern Alberta and has equalled the yield of Galt in the dark brown soil zone in south-central Alberta.

After early favorable test results, it is disappointing that Hector has been turned down by the malting trade, but its breeder, Dr S.A. Wells of Agriculture Canada's research station at Lethbridge, has other promising varieties 'in the works'. In fact one of them may even be licensed this spring.

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FOR IMMEDIATE RELEASE

PEACE RIVER RAPESEED VARIETIES

Why, as a general rule, does rapeseed grown in the Peace River region contain a higher level of erucic acid than rapeseed grown in other parts of Alberta?

According to Sherman Yelland, Alberta Agriculture's cereal and oilseeds crop specialist, there are two reasons for this situation. One is that there is less spraying done in the Peace River region to remove volunteer rapeseed in cereal crops. The result is that when these fields are again sown to rapeseed, the new crop is contaminated with seed from the older varieties which were high in erucic acid content.

The other reason for the erucic acid content of rapeseed grown in the Peace River region often being higher than that from elsewhere is that a larger percentage of farmers in that area are growing commercial rapeseed that has no guarantee of a low erucic acid content.

Of the 745,000 acres sown to rapeseed in the Peace River region last year, about 5 per cent were sown to undesirable intermediate erucic acid varieties like Echo. According to the Canadian Wheat Board's acreage statistics some delivery points in the Peace River area received more than 10 per cent of the rapeseed that had been grown from undesirable varieties. One delivery point had as much as 50 per cent of such seed.

Mr. Yelland points out that if Peace River growers continue to grow undesirable varieties like Echo, they will be at a real disadvantage when it comes to marketing their crops.

Some governments in the Western World and Japan have passed legislation which states that the erucic acid level of rapeseed oil used to manufacture edible products must be less than 5 per cent. Both Span and Torch meet this requirement, but Echo, Arlo and Polar do not.

Although Argentine varieties like Midas and Tower have a low erucic acid content (Tower is also low in glucosinolate) and have a higher potential yield than the Polish varieties, they are two to three weeks later maturing than the Polish types Torch and Span. Since rapeseed is severely affected by heavy fall frosts, there is considerable risk involved in growing Argentine varieties in the Peace River region.

Mr. Yelland says he hopes no R-500 rapeseed will be grown in the Peace River region this spring because of its inferior performance in this province and because volunteer plants will contaminate low erucic acid varieties in future years. New, inexpensive testing equipment makes it very easy for grain handlers and domestic crushers to detect such contamination.

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FOR IMMEDIATE RELEASE

FABABEANS FOR SILAGE

Fababeans are a good alternative to legumes as a silage crop.

Larry Gareau, Alberta Agriculture's forage crops specialist, says the plant industry division's fababean demonstration project, involving three years of test plot evaluations, indicates that fababeans make very good silage. He points out that these provincial test results are well supported by Agriculture Canada's research at Lethbridge.

According to Dr. D. B. Wilson of the research station at Lethbridge, fababeans ensile well even though the silage is a very dark color, similar to beet-top silage. "Since the moisture content of the plants at harvest time is likely to be close to 80 per cent, it is best to dry the plants for a day in the swath before ensiling the material," he says.

He also recommends planting fababeans in late April or early May at a rate of 150 to 200 pounds per acre and using a row spacing of from six to nine inches. If the seed is inoculated with nitrogen-fixing bacteria that are specific to fababeans, it should not be necessary to use a nitrogen fertilizer. "Most of the weeds," says Dr. Wilson "can be controlled by incorporating a recommended pre-seeding herbicide. Because fababeans respond well to timely irrigation, the soil should be provided with moisture throughout the entire growing season." To reduce disease losses, fababeans should not be grown on the same land more often than once in four years.

The scientists at the Lethbridge research station have found that irrigated fababeans can yield about the same amount of total dry matter per acre as oats, but that they have a much higher protein content. In one experiment where oats, cut in the early dough stage, contained 10.7 per cent protein, fababeans cut when the bottom pods had turned black contained 16.4 per cent protein. The protein content of the beans is highest in the seed, usually about 30 per cent, and lowest in the stalks, often about 5 per cent. The protein content of the leaves and pods are between these two extremes.

Time of harvest is important when fababeans are to be used for silage. "One year," says Dr. Wilson "we compared harvesting the beans on August 1 when the lower pods had just formed, with harvesting them three weeks later when the lower pods had just turned black. In this three week period, the total dry matter yield almost doubled."

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FOR IMMEDIATE RELEASE

MUSK OX VISITOR'S DAY

If you are interested in musk oxen, you are invited to attend a Musk Ox Visitor's Day on Saturday, May 1.

It has been organized by Clarence Burpee, president of the Musk Ox Research Association, and will he held on his farm which is one mile east of Hughenden on Highway 13. The agenda includes a guided tour of the farm where you will see Mr. Burpee's musk oxen, his corrals and the type of pasture he uses for these animals. There will also be a film on musk oxen and a discussion on musk ox ranching. Mr. Burpee will explain what is going on in the musk ox industry and where the industry hopes to go in the future.

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FOR IMMEDIATE RELEASE

COMMUNITY ORGANIZATIONS BRANCH APPOINTMENT

Les Reid, director of Alberta Agriculture's Family Farm Division, has announced the appointment of Pat Sheehan to the position of head of the community organizations branch.

In this position, Mrs. Sheehan will work with community groups that are closely associated with agriculture. She will help them identify the needs of the whole community, to develop a range of alternatives to meet the needs, to set priorities and goals and to develop projects and programs.

Mrs. Sheehan was born in Saskatchewan and moved to Alberta in 1943. She graduated from the University of Alberta with a B. Sc. (home economics) in 1950. She then joined Alberta Agriculture's extension staff as district home economist in Grande Prairie. In 1956 she left Alberta Agriculture for six years. During her absence she was an executive director of the YWCA in Lethbridge.

Upon rejoining Alberta Agriculture in 1962, Mrs. Sheehan taught at the Fairview College for a year and then spent two years as district home economist at Grande Prairie. In 1965 she became assistant regional resource co-ordinator for the Federal-Provincial Development Program in the Edson area. Three years later she became regional resource co-ordinator.

In 1972 Mrs. Sheehan transferred to Edmonton as a resource person to provincial staff. The following year she became program co-ordinator for the rural resources branch, the position she held until her present appointment.

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FOR IMMEDIATE RELEASE

DISTRICT AGRICULTURIST SUPERVISOR APPOINTED

Alberta Agriculture's extension director, J. G. Calpas, has announced the appointment of Roland Witte to the position of district agriculturist supevisor at Medicine Hat.

A native of Watson, Saskatchewan, Mr. Witte completed his high school and university studies in that province. He obtained his B. Sc. (agriculture) in 1970 from the University of Saskatchewan. While at university, Mr. Witte was employed by Agriculture Canada as a summer assistant on a grass and legume research project.

He joined Alberta Agriculture in May, 1970 as an assistant district agriculturist at Barrhead. In June of the following year, Mr. Witte was appointed district agriculturist at Spirit River where he remained until his present appointment.

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A JAPANESE ADVENTURE

Pat Farris showing a Holstein dairy cow at the largest annual dairy show in Hokkaido, Japan.

Have you ever used a 'Cow Shampoo'? Its high protein content apparently makes the hair really shine!

According to Pat Farris, shampoos are just one of a variety of products, including soaps and cosmetic creams, that the Japanese are manufacturing from cow's milk. Pat has just returned to her parent's dairy farm near Andrew, Alberta, after having spent 13 months on a Japanese dairy farm on the island of Hokkaido. She went to Hokkaido under the Alberta-Japanese Dairy Exchange Program.

Pat says the Japanese do much more advertising to encourage the use of milk and other dairy products than we do in Canada. "Pictures of cows coming out of a barn or standing in a paddock are continually appearing on television," she says "to advertise milk, ice cream, yoghurt, cheese and other dairy products. Japanese slogans are colorful and most ingenious. When you change your television channel you will often hear -- Moo!"

- (cont'd) -

Alberta

Phone (403) 427-2127

A Japanese Adventure (cont'd)

Although the Japanese sell a large volume of ice cream, yoghurt, and cheese, most of their dairy production is used as fluid milk. As in Alberta, it is stored in bulk tanks and picked up by trucks and taken to the dairy plants.

At the end of the second World War, only about 5 per cent of Japan's population used any type of dairy product. Now, as a result of higher incomes and clever advertising, including cartoons on television and in magazines, almost every Japanese family uses some type of dairy product.

Pat's duties on the Hokkaido dairy farm included milking, general dairy animal care and field work related to the dairy herd. This farm, like all Japanese dairy farms, had a pipeline milking system and modern feeding equipment. However, Japanese dairy farms are not as mechanized as those in Alberta and require considerably more manual labor for feeding, cleaning the barns and field work.

Labor is cheap in Japan but feed is expensive. According to Pat, dairy rations in that country contain a greater variety of feeds than is usually the case in Alberta. Most Japanese dairymen buy all their feed except their hay and silage. Usually there is no summer pasture for the cows,which are then kept in a small paddock behind the barn and fed concentrates and forage all the year round. Japanese dairy farmers receive a high government milk subsidy to encourage expansion of the industry.

Dairy herds in Hokkaido, which is the most northern island in Japan, and which supplies the rest of the country with most of its milk and dairy products, vary in size from 10 to 80 head with the average being about 25. Ninety-five per cent of the dairy cows in Hokkaido are Holsteins. The other 5 per cent are predominately Jerseys. "At the present time," Pat says "a week old Holstein bull calf fetches about $100 at local auction markets. Most of the calves go to a feedlot where they are fed for beef."

All Japanese dairy cows are bred by artificial insemination, and most of the semen comes from Canada. Because the majority of the better cows are sired by Canadian bulls, their milk production and butterfat level are similar to those in Canada.

- (cont'd) -

A Japanese Adventure (cont'd)

Pat describes the Japanese family with which she worked and lived as extremely warm and friendly. "The Japanese," she says "know how to extend a type of hospitality which is completely unknown to us in the Western World. Canadians have an extremely good image in Japan, and there are dozens of young dairy farmers who are anxious to work on a Canadian dairy farm. Those who have been here under the exchange program long to return." The exchange program provides for 10 Alberta dairy farmers to go to Japan and 10 Japanese dairy farmers to come to Alberta each year.

Pat says one of her funniest experiences in Japan occured upon her arrival. Most rural Japanese people sleep on the floor, but Pat's host family took a great deal of trouble to provide her with a bed. When she was shown to her room, the whole family gathered at the door to see how she was going to fit into it because she is considerably taller than the average Japanese. Luckily, to the delight of her hosts, she did manage to fit the bed!

Pat found the food in Japan very different to ours, but delicious and very nutritious. As for the Alberta-Japanese Dairy Exchange Program, she says she cannot begin to express her appreciation for her wonderful adventure, and she urges all adventurous young dairy farmers in Alberta to take advantage of the program if they possibly can. Her sentiments about the Japanese people are summed up in one sentence: "I love those people of the golden race -- all of them!"

Pat Farris (left) at a Japanese flower show in Hokkaido.

FOR IMMEDIATE RELEASE

ALBERTA FARMLAND SALE TRENDS

Beginner farmers may find themselves in difficulties if they go too deeply into debt to buy land.

This is the opinion of Alberta Agriculture's resource economist, Frank Hanus, who points out that the present price of farmland is considered to be high in relation to the expected increase in net farm income. "Production costs", he explains, "are increasing faster than farm produce prices".

Mr. Hanus says there are strong indications that the number of acres of farmland being traded will drop this year because of lower rates of increase in the net farm income and relatively high land prices. However, this decrease in the number of acres traded does not, in his view, mean that the price of farmland will be lower this year than it was last year. Because of inflation in the non-farming sector, those selling farmland will need to get a higher price for their land than last year. Buyers, on the other hand, will be more cautious in their purchases because of the plateau which seems to have been reached in commodity prices.

Market Review

Since 1973 about 3.1 million acres of farmland have been traded in Alberta each year. This figure represents close to 6 per cent of the province's total farmland. Last year the acreage traded was about 60 per cent more than it was in 1971.

According to Mr. Hanus, the rate of change in the volume of land traded has tended to follow the changes in net farm income, while the change in the selling price of farmland seems to have been governed by the rapidly escalating inflation rate.

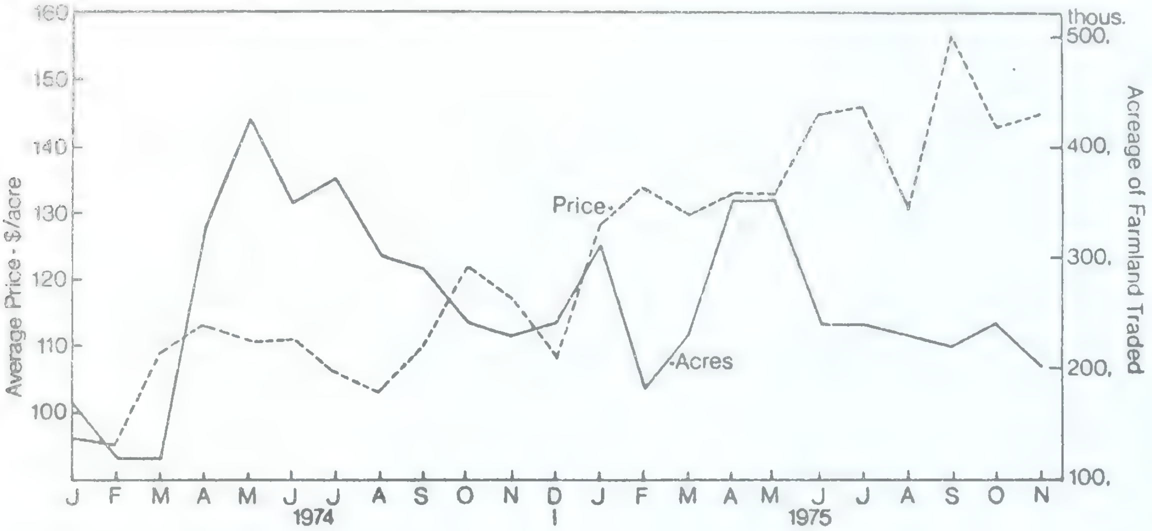
The slow down in the growth of net farm income which has taken place during the last two years has reduced farmland trading, but prices have continued to escalate, reflecting the rate of

-(cont'd)-

Alberta Farmland Sale Trends (cont'd)

inflation in the general economy. Mr. Hanus says "Unless there are substantial changes in the outlook of commodity and 'input' prices, land trading in the rural real estate market can be expected to drop off".

The following graph shows the fluctuation in the price and the acreage of farmland traded in Alberta during 1974 and 1975.



Current Situation

Of the several factors which affect the demand for farmland at any given price, the net income-generation potential of the land and the availability of long-term credit are the most important.

The net farm income of Alberta farmers reached an all-time high of $831.1 million in 1975. This figure represents a 200 per cent increase when compared with the net farm income in 1970. During the period from 1971 to 1974 government lending agencies extended almost $500 million in credit to Alberta farmers.

The average price of farmland last year was 2.5 times higher than the market price in 1970. The replacement value of farm implements, machinery and livestock also increased by about this amount during the last five years. Thus, the historic relationship between land and other farm assets was not disrupted by the escalation in farm land prices.

April 19, 1976

FOR IMMEDIATE RELEASE

INTENDED ACREAGE OF PRINCIPAL FIELD CROPS AND SUMMERFALLOW

Alberta farmers intend to plant 5.4 million acres of all classes of wheat this spring, according to a survey conducted by Statistics Canada.

This area, which could change for various reasons between the time the survey was taken in March and seeding, is 20 per cent larger than the 4.5 million acres seeded to wheat in 1975.

The acreage seeded to oats this year is anticipated to be 2.2 million acres, an increase of 5 per cent compared with 1975.

The area seeded to barley is expected to be 5.7 million acres, an increase of 4 per cent over last year's acreage.

The mixed grain acreage, predicted to be 400,000, is unchanged from 1975. The fall and spring rye forecast calls for 275,000 acres, down 8 per cent compared with 1975. The prospective rapeseed acreage is 900,000 acres, down 40 per cent from 1975, and the flaxseed acreage, expected to be 100,000 acres this year, is down 50 per cent from last year.

The potato acreage at 20,000 acres is up 11 per cent from 1975.

Alberta's summerfallow acreage is expected to decrease by 3 per cent to 6.8 million acres campared with 7.0 million acres in 1975.

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April 19, 1976

FOR IMMEDIATE RELEASE

HONEYBEES FLYING IN AIR CONDITIONED COMFORT

by Ulf Soehngen
Supervisor of Apiculture
Alberta Agriculture

About 1.5 million honeybees arrived in Edmonton recently in almost perfect condition after a 6,000-mile journey from Mexico City.

The 1,500 two-pound packages, each containing 7,000 workers and one queen, left Mexico City in the air conditioned hold of an Iberia Airlines 747 Boeing Jumbo jet bound for Montreal. Here the pallets (large platforms used for transporting bulk freight), each covered with plastic screening to prevent any bees from accidentally escaping into the aircraft's hold, were transferred to an Air Canada freighter headed for Winnipeg. A second freighter carried the bees to Edmonton, thereby completing the 17-hour journey.

This is the second year in which honeybees have been imported on a large scale by Alberta from Mexico. However, last year's shipments, carried in the cargo holds of passenger planes, were only moderately successful. This was mainly because the aircraft lacked the means of withdrawing the extra heat from their holds that was generated by the bees. The planes used this year can maintain hold temperatures that are within a range acceptable to the bees.

Both this year's and last year's shipments represent the culmination of Alberta Agriculture's efforts to broaden the supply base of package bees on which most Alberta beekeepers depend for starting their colonies each spring. From time to time traditional package bee sources in the United States have been unable to supply bees and queens in the numbers and quality required.

The success of the present project is due to the co-operation of many agencies including Alberta Agriculture, the Alberta Honey Producers' Co-operative Ltd., the Mexican Department of Agriculture and Ranching, C. P. Air, Air Canada and several Mexican beekeepers.

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April 19, 1976

FOR IMMEDIATE RELEASE

INCREASE IN NUMBER OF WARBLE INFESTED CATTLE MARKETED

An official of Alberta Agriculture reports that the number of warble infested cattle being delivered to auction markets and packing plants in the province increased considerably during the first two weeks of April compared with the same period in 1974 and 1975.

Jack Kerns of the livestock branch believes that poor cattle prices are the probable explanation for this situation. "Low prices," he says, " are causing cattlemen to cut corners." However, in Mr. Kerns' opinion, to not treat cattle for warbles is false economy in the extreme.

He points out that all grub infested cattle sold through provincial markets are automatically treated at the market, and that the owner is charged $2 a head. Two dollars a head is considerably more than it would cost to treat the animals at home.

In addition, cattle delivered to a packing plant are discounted if they are found to be infested with warble grubs.

To avoid these unnecessary expenses and to eliminate warbles in Alberta cattle herds, Mr. Kerns urges cattlemen to inspect all their animals now and to treat those that have warbles with a recommended systemic.

The last two weeks in April and the first two weeks in May are the ideal times to treat cattle for warbles. During this period the grubs are located just under the skin of the back where they can be easily detected and are most susceptible to treatment.

Information on treatment procedures and on recommended systemics can be obtained from agricultural fieldmen and from district agriculturists.

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April 19, 1976

FOR IMMEDIATE RELEASE

BUYING MOSS PEAT

If you are planning to use moss peat (peat moss) in your garden or greenhouse this spring, you would be wise to perform two simple quality control checks before you buy it.

Although the price of moss peat does not vary much from one supplier to another, the quality can vary considerably. Too often an inferior grade of moss peat costs just as much as a premium grade.

J. P. Sproule of the soils department at Olds College, says "Ten years ago we had little to be concerned about when we bought moss peat. A bale of peat was sphagnum moss peat which had a consistently low pH and a very low salt level. The peat was ready to use with a minimum of handling."

However, there is now a wide choice of ready soil mixes, peat mixtures and peats on the market. The challenge is to turn this situation into an asset for the homeowner or greenhouse operator. "We now feel quite differently about organic materials than we did when the emphasis was on manures and other readily decomposable materials," Mr. Sproule explains. "We used to think the decomposable materials improved the soil texture, and, hence, the porosity through decomposition. Now we are stressing organic materials with a high fibre content which remain in the soil for a long time."

The problem facing moss peat users today is that they cannot be sure whether the next shipment of moss peat will be moss peat, sedge peat or a combination of both. Added to this uncertainty is the variability in the physical and chemical properties of the product that also occurs from one shipment to another.

While a homeowner or greenhouse operator cannot perform all the physical and chemical tests necessary to evaluate moss peat and the moss peat mixtures before he makes his purchase, he can do the rub and squeeze tests. If the sample rates high in both of these tests, it will generally meet the physical and chemical specifications of a high quality product.

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Buying Peat Moss (cont'd)

Rub Test

In the rub test you roll about a spoonful of wet peat between your forefinger and thumb. If the sample is high in fibre, it will form a ball and will not stain your fingers. If, on the other hand, the sample is low in fibre, it will not roll well and will cause some staining. If it does not contain any fibre, it will not form a ball at all and will smear and stain your fingers.

Squeeze Test

In the squeeze test you take a handful of wet peat and squeeze it to remove the moisture. If the sample has a high fibre content, the peat will be a light gold color when you release your hand. If it is low in fibre, there will be no color change. If the sample is black and 'mucky', the product is sedge or a 'muck-type' peat moss.

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CORRECTION: The sixth paragraph of the article "Vegetable Growers' Assistance Programs Announced" (April 12 issue of Agri News) should read "Eligible vegetable producers should apply to the Alberta Agricultural Development Corporation's loans officer in their district for the low cost loans" . . . NOT to the Alberta Agricultural Development Corporation in Camrose as stated in the article.

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ALGAE AND AQUATIC WEED CONTROL IN FARM DUGOUTS

by Andrew Livingstone
Alberta Agriculture's Engineering Technologist
at Barrhead

Mechanical control and chemical control are the two methods for removing algae and aquatic weed growth in farm dugouts. The mechanical method is preferred over the chemical method in dugouts stocked with fish because even very low concentrations of most chemicals are toxic to fish.

Algae are small plants, found in almost all surface water, which thrive in sunlight, a warm temperature and where there is an abundance of food. Runoff water from fertilized agricultural land provides them with an abundance of food because it is rich in nitrates and phosphates. In the warm summer weather the algae multiply at a tremendous rate, forming floating mats on the dugout surface.

Aquatic weeds can be divided into three categories: emergent aquatic plants, surface floaters and submerged aquatic plants. Emergent aquatics include cattails and rushes; surface floaters are mainly duckweed, while submergent aquatics include Canada water weed, coontail and water lilies.

The most commonly used mechanical control methods for removing algae and aquatic plants from a farm dugout are hand cleaning and chaining. Hand cleaning is recommended for dugouts where the quantity of aquatic growth is small.

Chaining involves using a tractor on each side of the dugout to drag a heavy chain along the bottom. The chain tears loose the aquatic plants which then float to the surface of the water where they can be skimmed off.

Other mechanical control methods include underwater power mowers and draining the dugout. Because power mowers have a maximum operating depth of only four feet, their use is limited to the banks of the dugout. Draining the dugout allows the sun and air to kill most of the aquatic weeds and algae, but well-rooted emergent aquatics are able to withstand this drying process.

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Algae and Aquatic Weed Control in Farm Dugouts (cont'd)

Chemical Control

An individual can apply an approved chemical to his dugout, a small slough on his land or to a short distance of private lake frontage without obtaining an application permit. However, he must have an application permit for treating any other surface body of water.

One application of copper sulphate (bluestone) in the early spring and another in the late summer will usually control algae quite successfully in a dugout. The recommended chemical rate for an average-sized dugout is 4 to 6 pounds of copper sulphate. The chemical can be either dragged through the dugout water in a cloth bag until dissolved or it can be mixed with a few gallons of water and sprayed over the entire dugout surface. However, since copper sulphate is extremely toxic to fish, it should not be used in a dugout that is stocked with fish.

Cutrine (chelated copper algaecide) can be used to control algae in a dugout that is stocked with fish, providing the water is hard. It should not be used in soft water because it is toxic in soft water. Cutrine can be applied in the form of a dilute spray, but only when the water temperature is above 15.5°C.

Amitrole T (amitrole) is used to control emergent aquatic plants, especially cattails and rushes. The plants should be sprayed only above the water level. This chemical is most effective when the plants are starting to bloom. The recommended rate is 10 pounds per acre of dugout surface in 100 gallons of water plus a wetting agent.

Dalapon can be used in the same way as Amitrole T to control emergent aquatic plants, but the rate here is 10 to 20 pounds per acre of dugout surface in 100 gallons of water plus a wetting agent. The higher rate is recommended for heavily infested dugouts.

Reglone A (diquat) is mainly used to control submerged aquatic plants, surface floaters and certain algae species. It is best applied as a spray when the weeds are in an active stage of growth, which, in Alberta,is usually during June and early July. Normally 1.5 to 2.0 pounds of Reglone A mixed with 100 gallons of water plus a wetting agent is the most effective spray. Reglone A can also be applied with a small suction pump to submerged aquatic plants that are four to six inches below the water surface.

Algae and Aquatic Weed Control in Farm Dugouts (cont'd)

Gramaxone S (paraquat) can be used with Reglone A in a one to one mixture. It is mainly recommended for submerged aquatic weeds. However, Gramaxone S should not be used unless Reglone A does not work alone.

Aquathol (endothal), available as a liquid or in granular form, is generally used to control submerged aquatics. It should be applied as soon as the weeds start growing so that the lowest rate can be used.

Aquathol plus Silvex, at a concentration of 4 pounds in 100 gallons of water, is effective as a surface spray for controlling water lilies. It should be applied when the lilies are in the early bloom to full-bloom stage.

Water which has been treated with Reglone A or Aquathol should not be drunk for 24 hours after it has been treated. Water treated with Gramaxone or Aqualthol plus Silvex should not be drunk for 7 days after treatment. Since Amitrole T and dalapon are applied above the water level to aquatic plants, these chemicals should not be present in the water in any significant quantities.

Regardless of the method used, treatment of aquatic weeds should be commenced as soon as the weeds show any sign of growth. In the case of algae, the dugout should be treated as soon as it is free of ice.

Farmers who want technical assistance in treating their dugouts should contact their district agriculturist or agricultural engineering technologist.

April 19, 1976

FOR IMMEDIATE RELEASE

POISONOUS PLANTS

There are six main species of plants that are poisonous to cattle, but only two of these cause serious concern to cattlemen. The two are tall larkspur and water hemlock.

Tall Larkspur

Tall larkspur grows in moist areas that are 4,000 to 9,000 feet above sea level. They are most plentiful in underbrush and among poplar and willow scrub, especially on north-east slopes. Most poisonings from this plant occur in the spring and early summer.

Tall larkspur plants are two to six feet high and have a smooth stem. Their leaves are round and divided into from three to five sections. The flowers are bluish purple and have a curved spur.

According to Dr. Frank Baker, Alberta Agriculture's beef cattle extension veterinarian, typical signs of larkspur poisoning include the sudden falling of an animal, a staggering gait, stiffness in the limbs, constipation, slobbering and sometimes bloating. A poisoned animal may be found lying on the ground with its legs rigidly extended.

Although treatment is not usually effective, some mild cases of poisoning may recover. "The sick animal should be allowed to rest and a purgative or mineral oil may be given to clear the digestive tract," Dr. Baker says "If the animal has bloated, the condition should be relieved."

Poisonings can be prevented by digging out the larkspur roots, fencing off the area where the plants are growing or grazing the area only after the plants have set their seeds. This is usually about mid-August.

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Poisonous Plants (cont'd)

Water Hemlock

Water hemlock grows in wet, marshy land in the foothill and prairie regions of Alberta. The plants are two to six feet high and have compound heads of tiny, white flowers. Probably the easiest way to identify them is by examining their roots. When cut, the rootstock (the part just below the stem) will be divided into narrow chambers, separated by thin partitions. Since the juice in the rootstock is extremely poisonous, great care should be taken to avoid getting any of the juice into a cut or scratch on the hand. The roots attached to the rootstock may be either thick and fleshy or thin and fibrous, depending upon the species of water hemlock. Both the rootstock and roots are poisonous at any time of the year, but poisonings usually occur in the early spring when the roots are likely to be pulled up by their new shoots. These shoots are also poisonous.

Typical signs of poisoning are rapid breathing, frothing at the mouth, violent convulsions when the animal falls and bellowing.

"As with tall larkspur poisoning, treatment is usually of little use," Dr. Baker says.

Digging out the roots or fencing off the area where water hemlock are known to grow are the only practical measures of control.

Algae

Sometimes algae reaches sufficient concentrations in a dugout, lake or slough to poison cattle. Hot weather and a gentle wind from the right direction will often cause a heavy concentration of this weed.

Typical signs of poisoning include muscle tremors, a staggering gait, convulsions, jaundice and sudden death. According to Dr. Baker, there is little that can be done for cattle suffering from algae poisoning except to remove them from the source of poison.

April 19, 1976

FOR IMMEDIATE RELEASE

CHOOSING A GOOD DAIRY GOAT

If you do not intend to show the dairy goat you buy, you do not need registration papers, but always make sure you get record of production information.

In the case of a mature goat ask for a record of her milk production and that of her offspring. If you buy a goat which has not yet produced milk ask for the production records of her dam.

A good producing dairy goat averages close to 3,000 pounds of milk in a 305-day lactation period or about 10 to 12 lbs a day. The world milk record for a goat is held by an Australian goat which has produced 7,400 pounds of milk in her first lactation period of 365 days.

A dairy goat does not reach her peak milk production until she is about eight years old at which time she levels off. Many goats continue milking until they are 14 or 15 years old. It is apparently very easy to train a goat to continue milking for two years without being rebred. After her first year of milking, her milk will decrease in the fall but increase again the following spring.

If you are buying your first goat you would be wise to milk her and taste her milk before making your purchase. In this way you can make sure that you get an easy milker and that she does not give milk with an off-flavor. Very occasionally a goat will produce milk which will always have an off-flavor.

What are the physical characteristics of a good dairy goat? Like a good dairy cow, she should have a feminine head, a slender neck, sharp withers, a well-defined backbone and thigh, thin thighs and rather fine bones.

Her skin should be thin and fine over the ribs and she should have a wide spring of rib and a roomy barrel. She should also have a deep, wide chest. Her udder should be large when full and considerably smaller when empty. However, a large udder does not always mean a high milk yield.

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Choosing a Good Dairy Goat (cont'd)

What does a good goat cost? A good dairy goat which has had its first kid and is in milk will cost you at least $125. An 8 to 10-pound producer which costs $150 is a much better investment than five 2-pound producers which cost $30 each.

You can obtain information on how to go about finding your first goat from Mrs. P. Mausolf, editor of the Alberta Goat Breeders' Associations's publication. Her address is R.R. 6, Site 6, Box 16, Edmonton (Telephone no. 973-3777).

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April 19, 1976

FOR IMMEDIATE RELEASE

CHOOSING ORNAMENTAL TREES AND SHRUBS

Are you wondering what type of ornamental tree or shrub you should buy this spring? Here are some facts that may help you to decide what you want and what would be suitable for your proposed planting site.

Showy Blooms: crabapples, daphne, false spirea, hawthorns, honeysuckles, hydrangea, lilacs, mock orange, mountain ash, pontentillas, flowering plums, pincherry, May day, saskatoon, spireas, Ussurian pear, cranberries and roses.

Red or Purple Foliage (throughout the season): purple leaved sandcherry, Shubert chokecherry and royalty crabapple.

Silver Foliage: coyote willow, rocky mountain juniper, sea buckthorn, Siberian white willow and silver buffaloberry.

Golden and/or Variegated Foliage: dogwoods, golden nine bark and golden elder.

Colored Fall Foliage: American cranberry, amur maple, dogwoods, early lilacs, burning bush, mountain ash, paper birch, cotoneaster, nannyberry, pincherry, Siberian currant, Siberian larch, smooth sumac, snowwhite spirea and Ussurian pear.

Showy Fruit: cherry prinsepia, crabapples, burning bush, European red elder, hawthorns, honeysuckles, mountain ash, sea buckthorn, silver buffaloberry, cranberries and roses.

Attractive Bark: amur chokecherry , common nine bark, birches, Maack's burning bush, redosier, dogwood, Siberian dogwood, golden willow and redstem willow. To get the best bark effect redosier and Siberian dogwoods should be cut back periodically. Golden and redstem willows should be cut back every spring.

- (cont'd) -

Choosing Ornamental Trees and Shrubs (cont'd)

Alkali Tolerant Ornamentals

Caraganas, Colorado spruce, lilacs (except the tree lilac), potentillas, rocky mountain junipers, sea buckthorn, Siberian salt tree, silver buffaloberry and three lobed spirea.

Ornamental Trees and Shrubs Suitable for Extreme Northern Areas

Redosier and yellowtwig dogwoods, Siberian larch, globe and pygmy caraganas, late lilacs, laurel leaf willow, northwest poplar, paper birch and Tartarian honeysuckles.

Shade Tolerant Ornamentals

Currants, dogwoods, dwarf burning bush, February daphne, cotoneaster, honeysuckles, hydrangeas, saskatoons and cranberries.

Ornamentals that are Tolerant of Hot, Dry Conditions

Broom, caraganas, cherry prinsepia, cotoneaster, junipers, nine bark, potentillas, sea buckthorn, Siberian salt tree, silver buffaloberry and smooth sumac.

The Alberta Horticultural Guide gives the height and spread of these trees and shrubs when mature so that you can visualize them and choose a suitable planting site in your landscape scheme.

Copies of the Alberta Horticultural Guide may be obtained from your district agriculturist or the publications office, Alberta Agriculture, 1B Agriculture Building, 9718 - 107 Street, Edmonton, Alberta, T5K 2C8.

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AGRI-NEWS

April 26, 1976

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Alberta
COMMUNICATIONS

April 26, 1976

FOR IMMEDIATE RELEASE

FARM ACCIDENT MONITORING SYSTEM TO BE ESTABLISHED

Alberta Agriculture, in co-operation with the Alberta Department of Labor and a number of other agencies, is going to set up a farm accident monitoring system.

This action was decided upon after a meeting sponsored by Alberta Agriculture. It was held in response to the present demand by government and private agencies and the public for farm accident statistics and was attended by representatives from the following agencies the Alberta Department of Labor, the Alberta Hospital Services Commission, the Alberta Workers' Compensation Board, the Alberta Safety Council, the Alberta Health Care Insurance Commission, Unifarm, Agriculture Manpower, the Alberta Department of Health, W.W. Cross Cancer Hospital and the Alberta Bureau of Statistics.

Last year a research survey conducted by Alberta Agriculture's farm development division showed that a considerable number of people are injured on Alberta farms each year, and that there is an urgent need for a thorough, continuing farm accident reporting system in the province.

Accident information that is available now is usually a by-product of a recording system that is concerned with only a small segment of the total picture. Hence, important data is often left out when it is not pertinent to the agency collecting it.

It was agreed at the meeting that a good data collecting system on farm accidents should provide information on the nature of the injury, the cause of the accident and the site of the accident for patients that have to be hospitalized and for those who do not have to be hospitalized.

It was also decided at the meeting that farm accidents need to be monitored so that some means of reducing their number can be adopted. At the present time meaningful statistics on farm accidents are extremely difficult to obtain, and the hazards of farming are only partially known.

FOR IMMEDIATE RELEASE

HIGHER NITROGEN LEVELS IN ALBERTA SOILS

Soil samples submitted to Alberta Agriculture's soil and feed testing laboratory last fall contained higher nitrogen levels than has been the case for a number of years. However, it is important that this fact alone not be used for predicting 1976 nitrogen fertilizer requirements.

According to Richard Leitch, soils specialist at the laboratory, the high-nitrogen levels recorded for samples obtained from 1975 stubble and fallow fields were most common in samples submitted from central and northern areas of the province. However, samples from southern Alberta also showed a moderate increase in the level of nitrogen.

Although last year's unusually mild, open fall may be partly responsible for the higher than normal nitrogen levels in soil samples, there are a number of factors which can cause the nitrogen level in a soil sample to be higher than it actually is in the field from which the sample was taken. These factors include contamination of the sample, failure to air-dry the sample and incomplete or incorrect information supplied with the sample.

"Contamination of soil samples by a nitrogen fertilizer having been applied to the field before it was sampled was responsible for more high nitrogen test results last fall than has been the case in previous years," Mr. Leitch says. He stresses that fields should be sampled before a fertilizer is applied. However, if this is not possible, the kind of fertilizer used, the rate and the time of application should all be recorded on the information sheet submitted with the sample.

Many of the soil samples taken last fall were moist when they arrived at the laboratory. The result was a nitrogen build-up in the samples. The fact that many of these moist samples had been delayed at various points in the postal system because of the postal strike, or held by farmers until the strike was over, caused an even higher nitrogen build-up than would normally have occurred. If, however, the samples had been air-dried by spreading them thinly on clean paper for approximately three days before packaging, there would not have been a nitrogen build-up even after several months

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Higher Nitrogen Levels in Alberta Soils (cont'd)

Incomplete or incorrect information also played a part in the high nitrogen levels recorded last fall. "It is essential," says Mr. Leitch, "that complete information concerning past fertilizer and cropping practices be submitted with each sample." Misleading results can occur if, for example, a sample taken from a fallow field is recorded on the information sheet as having come from a stubble field. Such incorrect information could result in the test showing an unusually high nitrogen level for the stubble field which, in turn, would result in an incorrect recommendation.

If a farmer is confident that a high nitrogen level is not the result of contamination, failure to air-dry the sample he submitted or incorrect information on the information sheet, then his soil test results will be correct and the fertilizer recommendations will be reliable. If, on the other hand, he suspects that one of the above factors may be responsible for his unusually high nitrogen test results, he might be wise to resample the field this spring.

"Although the early spring thaw, particularly in central and southern Alberta, may increase the nitrogen level in soils prior to seeding, the majority of stubble fields in the province will be deficient in this nutrient, and should respond well to an application of nitrogen fertilizer," Mr. Leitch says. "However, fallow fields should contain adequate levels of nitrogen unless they were poorly fallowed (excessive weeds, cool, dry weather etc). In the latter case they may be somewhat deficient in nitrogen, and hence, respond well to low or medium fertilizer rates."

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FOR IMMEDIATE RELEASE

SAWFLY DAMAGE ON THE INCREASE

If your wheat fields showed any signs of sawfly damage last year, you would be wise to grow a sawfly resistant wheat variety this year, says the head of Alberta Agriculture's field crops branch, Dave Jantzie.

It seems that the wheat stem sawfly is making a comeback after having caused very few problems to Prairie farmers for the past 20 years. Last year both federal and provincial departments of agriculture received numerous calls about sawfly damage. Once a field becomes infested with sawflies, the only thing that can be done to save the grain is to swath it early.

The wheat stem sawfly lays its eggs inside wheat plants which have hollow stems. The larvae tunnel up and down inside the stem before moving into the base where they girdle the stem before pupating for the winter. The first wind that comes along after the stems have been girdled snaps them off and the grain-bearing heads fall to the ground.

The difference between non-resistant and resistant wheat varieties is that the latter have solid stems. The solid stem prevents the sawflies from gaining entry to the plant.

Hence, the best way of controlling sawfly damage is to grow a sawfly resistant wheat variety of which there are two recommended for Alberta. They are the previously popular Chinook and the variety that was licensed in 1972 called Canuck. According to the Alberta Cereals and Oilseeds Advisory Committee, Canuck has a 5 per cent higher average yield than Chinook and is more resistant to sawfly damage.

However, considerable concern was expressed by Prairie farmers last year about the amount of sawfly damage in Canuck wheat. Many farmers report 10 to 20 per cent sawfly damage

- (cont'd) -

Sawfly Damage on the Increase (cont'd)

along the edges of their fields. Naturally, they wondered whether the variety was any good or whether they had not received pure seed.

The problem seems to lie in the late developing tillers. Because these are not as solid as the main stem or tiller, they are more susceptible to sawfly damage. The majority of late tillers develop in a thinly-seeded field.

Weather is another factor. Since stem solidity develops better during a warm, dry season than during a cool, wet season, last summer's fairly cool weather was not conducive to the development of solid stems.

Agriculture Canada reports that from 1968 to 1973 the percentage of Canuck wheat damaged by sawflies was 18, 13, 9, 5, 9 and 12 per cent respectively compared with 90, 65, 31, 21, 74 and 73 per cent for Neepawa wheat.

"Although Canuck is not perfect, it is the best sawfly-resistant wheat variety we have at the present time", says Mr. Jantzie.

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CORRECTION: The seventh paragraph of the article "Algae and Aquatic Weed Control in Farm Dugouts" (April 19 issue of "Agri-News") the first sentence should read "An individual can apply an approved chemical to his dugout or a small slough on his land without obtaining an application permit." ("to a short distance of private lake frontage")should be deleted.

April 26, 1976

FOR IMMEDIATE RELEASE

WEATHER CAN INFLUENCE GASTROENTERITIS

Research carried out by the British Ministry of Agriculture's Central Veterinary Laboratory indicates that the severity of parasitic gastroenteritis is influenced by the weather in the summer as well as the fall of the previous year.

The research shows that during a dry summer the incidence of the condition in lambs is low, but that the source of infection may build up in the ewes with the onset of fall and winter rains. The ewes then ensure an ample reservoir of infection in the form of eggs deposited on the pasture the following spring. These eggs are picked up by the lambs during grazing. However, because the larvae thrive under wet concitions, it requires a wet summer for maximum infection to occur in the lambs.

The director of Alberta Agriculture's veterinary services division, Dr. H. N. Vance, says that a similar build-up of infection in ewes can occur in this province when fall weather is unusually wet.

The principle regarding the incidence of gastroenteritis in sheep also applies to cattle, according to the British release.

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April 26, 1976

FOR IMMEDIATE RELEASE

ALBERTA'S 1975 HONEY PRODUCTION

Alberta Agriculture statistics show that despite a poor year weatherwise, provincial beekeepers produced 30 per cent of Canada's honey crop last year.

Although the average yield per colony was only 88 pounds compared with an average of 151 pounds in the 1964-73 period, Alberta beekeepers produced 13.9 million pounds of honey in 1975. The average yield per colony in 1974 was 115 pounds.

The number of beekeepers increased last year to 2,000 compared with 1,800 in 1974, and an average of 1,310 in the 1964-73 period. The number of colonies also increased to 158,000 compared with 156,000 in 1974 and an average of 116,180 in the 1964-73 period.

However, because of the poor yields, total production for the province fell to 13,904,000 in 1975 compared with 17,940,000 in 1974 and a 1964-73 average of 17,546,000 pounds.

The value of Alberta's 1975 honey crop plus wax was $5,765,000 in 1975 compared with $7,654,000 in 1974 and an average of $3,803,000 for the 1964-73 period.

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FOR IMMEDIATE RELEASE

CHOOSING A FIELD SPRAYER

Are you planning to buy a new field sprayer this spring? If so you will find the publication "Field Sprayers" invaluable as a guide for selecting a sprayer that will operate efficiently and apply agricultural chemicals accurately.

It discusses all the important components of a field sprayer in detail. These include the various types and sizes of nozzles available today, the proper selection and operation of which are the most critical factor in a good spraying job.

The publication also describes the most satisfactory location for nozzle screens and sprayer booms from the point of view of an even chemical distribution pattern. A fast, simply adjusted boom is essential for an efficient, effective spraying job.

The correct selection of a pump is important to ensure sufficient pressure at the nozzles and adequate agitation in the tank. "Field Sprayers" contains tables showing pump capacities required for various sprayer sizes and the capacities of some of the commonly used roller pumps.

Large capacity pumps will not provide satisfactory performance if the hoses and fittings are undersized. Hence, the minimum recommended hose and fitting sizes of various capacity pumps are included in the publication.

Other sections of the publication cover pressure gauges, filters and screens and tanks. The 'pros' and 'cons' of both galvanized steel and aluminum tanks are pointed out and discussed. Agitators, from the point of view of speed required to keep some of the new chemicals in suspension, are also covered.

Still another section deals with spray drift, one of the most serious problems in spraying today, and with the timing and general procedures required for optimum spraying results.

The final section contains nozzle calibration charts and a speed chart.

Copies of "Field Sprayers" are available from all district agriculturists and from the publications office, Alberta Agriculture, 9718 - 107 Street, Edmonton, Alberta, T5K 2C8.

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FOR IMMEDIATE RELEASE

WATER DIVERSION PROCEDURE

Do you have a surface water drainage problem? Do you know the procedure to follow to correct it?

The Alberta Water Resources Act states that a person may obtain a license to divert water to control flooding or water erosion providing it does not interfere with the water rights of others.

The procedure is as follows:

- The landowner must submit a request in writing to the regional administrator of the water resources management division for technical assistance to construct a drainage system.
- The regional administrator will send a fieldman to inspect the problem and to advise the applicant on whether or not a drainage project to correct the situation should be investigated.
- If a diversion project is feasible, the applicant must then get preliminary survey consent forms signed by other landowners who may be affected by the proposed project.
- Upon receipt of these consent forms, the regional administrator of the water resources management division will arrange for a survey of the area and to have a design and cost estimate of the project prepared.
- Next a meeting of all the landowners who will be affected must be called by the applicant to discuss the possible effects of the proposed project. This meeting will be attended by a representative of the water resources management division.
- The applicant must obtain a written agreement from all the affected landowners giving him permission to go ahead with the project.
- The applicant must then apply to the administrator of the water resources management division for permission to proceed with the construction of the project.

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Water Diversion Procedure (cont'd)

- The water resources management division will send out engineers to carry out a construction survey, after which construction can proceed.
- The applicant will be issued a license when construction is complete and the project has been inspected and approved by the water resources management division.

The applicant is required to pay for all construction costs related to the project unless the project involves a number of farmers and benefits the whole community. In such cases a cost-sharing agreement may be negotiated with the province.

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FOR IMMEDIATE RELEASE

DOUBLE YOUR RAPESEED YIELD

Are you planning to grow rapeseed this year? If so why not plan to double or even triple Canada's average national yield? Many rapeseed growers have done it.

The rapeseed contests sponsored by Elanco Products in 1974 and 1975 have shown without a doubt that efficient rapeseed producers can obtain yields of 30 bushels per acre or more compared with the national average of 16.2 bushels per acre. One grower recorded a 53-bushel per acre yield in 1974, and 275 of the 348 farmers who entered the competition recorded yields in excess of 30 bushels per acre. These yields were achieved in spite of very poor growing conditions in 1974.

Last year's results were equally encouraging. Even though the spring was late and wet, five growers recorded yields ranging from 43.8 to 52.4 bushels per acre. An Alberta farmer near Penhold obtained 51.7 bushels per acre on barley stubble.

Increasing your output per acre will increase your income and help to stabilize Canada's rapeseed industry. According to Alberta Agriculture's cereal and oilseeds crop specialist, Sherman Yelland, the instability in the acreage alloted to rapeseed each year is causing serious concern to our overseas customers, particularly, Japan, Canada's most constant buyer. Instability in acreage is also causing concern to our domestic crushers who are increasing in numbers.

This year's Canadian rapeseed acreage is forecast to be 43 per cent lower than last year, which will make it the smallest acreage planted to this crop since 1969. The fact that there is a strong demand for wheat, which is attractively priced and has fewer production problems, is, undoubtedly, responsible for this situation.

"The challenge," Mr. Yelland says, "is to compensate for the reduced number of rapeseed acres this year by doubling our average yield in the prairie provinces."

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FOR IMMEDIATE RELEASE

ENGINEERING AND HOME DESIGN BRANCH APPOINTMENT

J. L. Reid, director of Alberta Agriculture's farm development division, has announced the appointment of G. L. Calver to the position of associate director with the farm development division.

As associate director he will be responsible for engineering field services branch, home and community design branch and systems engineering branch programs. He will also work closely with the Farm Implement Act administrator and co-ordinate in-house engineering and home design research.

Mr. Calver joined Alberta Agriculture in 1973 as chief engineer with the engineering and home design branch. For the past two years he has been acting branch head.

He has had experience with the Ontario Ministry of Agriculture and Food, with the Food and Agriculture Organization of the United Nations and with the British Columbia Department of Agriculture. His past experience will prove helpful in his new position.

Mr. Calver graduated from the University of British Columbia with a bachelor of applied science degree (agricultural engineering) and is a registered professional engineer in Alberta.

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